

CREATROL

RS485 Bus Sensor

|

Active Code Interface Protocol

V1.0.1



造作
CREATROL

Example 1: Active Reporting Input Register (Example

ID=01)

Function Description	Sensor -> Host	Status
Suggest Turn On/Off Light	55 AC 08 01 81 00 01 00 00 8C B6	Turn Off Light
	55 AC 08 01 81 00 01 00 01 8D B6	Turn On Light
Sensing Status	55 AC 08 01 81 00 02 00 00 8D B6	No One
	55 AC 08 01 81 00 02 00 01 8E B6	Someone
Action Amplitude	55 AC 08 01 81 00 03 00 00 8E B6	No One
	55 AC 08 01 81 00 03 00 01 8F B6	Motion
	55 AC 08 01 81 00 03 00 02 90 B6	Stationary
Real-time Illuminance	55 AC 08 01 81 00 04 01 02 92 B6	258Lux
Illuminance Level	55 AC 08 01 81 00 05 00 00 90 B6	Invalid Value
	55 AC 08 01 81 00 05 00 01 91 B6	Low Illumination
	55 AC 08 01 81 00 05 00 02 92 B6	Medium Illumination
	55 AC 08 01 81 00 05 00 03 93 B6	High Illumination
Motion Posture	55 AC 08 01 81 00 07 00 00 92 B6	No Trigger
	55 AC 08 01 81 00 07 00 01 93 B6	Fall
	55 AC 08 01 81 00 07 00 02 94 B6	Stay
	55 AC 08 01 81 00 07 00 03 95 B6	Walk
Leave Bed Trigger	55 AC 08 01 81 00 08 00 00 93 B6	No Trigger
	55 AC 08 01 81 00 08 00 01 94 B6	Left Leave Bed
	55 AC 08 01 81 00 08 00 02 95 B6	Right Leave Bed
	55 AC 08 01 81 00 08 00 03 96 B6	Left Return to Bed
	55 AC 08 01 81 00 08 00 04 97 B6	Right Return to Bed
Leave Area	55 AC 08 01 81 00 09 00 00 94 B6	No Trigger
	55 AC 08 01 81 00 09 00 01 95 B6	Leave Area
	55 AC 08 01 81 00 09 00 02 96 B6	Enter Area
Approach and Move Away Trigger	55 AC 08 01 81 00 0A 00 00 95 B6	No Trigger
	55 AC 08 01 81 00 0A 00 01 96 B6	Approach Trigger
	55 AC 08 01 81 00 0A 00 02 97 B6	Move Away Trigger
Distance Segment Trigger	55 AC 08 01 81 00 0B 00 00 96 B6	No Trigger
	55 AC 08 01 81 00 0B 00 01 97 B6	Distance Segment A Occupancy
	55 AC 08 01 81 00 0B 00 02 98 B6	Distance Segment B Occupancy
	55 AC 08 01 81 00 0B 00 03 99 B6	Distance Segment C Occupancy

Stay Timeout Trigger	55 AC 08 01 81 00 0C 00 00 97 B6	No Trigger
	55 AC 08 01 81 00 0C 00 01 98 B6	Distance Segment A Stay Timeout
	55 AC 08 01 81 00 0C 00 02 99 B6	Distance Segment B Stay Timeout
	55 AC 08 01 81 00 0C 00 03 9A B6	Distance Segment C Stay Timeout

Example 2: Read Write General Holding Register

(Example ID=01)

Host->Sensor	Description	Detailed Explanation
55 CA 08 01 91 00 03 00 02 A5 B6	Input Register 0x0002 allows active reporting, others deleted	P26
55 CA 0A 01 91 00 03 00 02 00 03 A5 B6	Input Registers 0x0002, 0x0003 allow active reporting, others deleted	
55 CA 08 01 92 00 03 00 01 A5 B6	Add 1 input register to allow active reporting, others remain unchanged	
55 CA 0C 01 92 00 03 00 03 00 04 00 07 A5 B6	Add 1 input register to allow active reporting, others remain unchanged	
55 CA 08 01 93 00 03 00 01 A5 B6	Delete 1 active reporting input register	
55 CA 0A 01 93 00 03 00 01 00 03 A5 B6	Delete Multiple Active Reporting Input Registers	
55 CA 06 01 94 00 03 A5 B6	Delete All Active Reporting Input Registers	
55 CA 08 01 95 00 03 00 02 A5 B6	Query if Input Register 0x0002 allows reporting	
55 CA 08 FF 06 00 01 00 05 A5 B6	Set Sensor ID to 05	P50
55 CA 08 FF 03 00 01 00 01 A5 B6	Read Sensor ID	
55 CA 08 01 06 00 07 00 01 A5 B6	Clear Device Fault Code	
55 CA 08 01 06 00 0A 00 02 A5 B6	Set Sensor to Factory Reset	
55 CA 08 01 06 00 0B 00 03 A5 B6	Set Sensor to Maintain Current State, Resume Operation After 3 Seconds	

55 CA 08 01 06 00 0B 00 00 A5 B6	Set Sensor to Resume Operation Immediately
55 CA 08 01 06 00 0C 00 0A A5 B6	Set Sensor State to Zero, Resume Operation After 10 Seconds
55 CA 08 01 03 00 0C 00 01 A5 B 6	Query Sensor Operating Status
55 CA 08 01 06 00 0D 00 01 A5 B6	Set Sensor to Power On
55 CA 08 01 06 00 0D 00 02 A5 B6	Set Sensor to Power Off
55 CA 08 01 06 00 0D 00 03 A5 B6	Set Sensor to Restart
55 CA 08 01 06 00 0E 00 01 A5 B6	Locate and Identify Sensor, Indicator Light Starts Flashing
55 CA 08 01 06 00 0E 00 00 A5 B6	Locate and Identify Sensor, Indicator Light Stops Flashing
55 CA 08 01 06 00 0F 00 01 A5 B6	Turn On Sensor Indicator Light
55 CA 08 01 06 00 0F 00 02 A5 B6	Turn off the sensor indicator light
55 CA 08 0 1 06 00 0F 00 03 A5 B 6	Enable night light mode
55 CA 08 01 06 0 0 13 00 01 A5 B6	Set sensor status change reporting interval
55 CA 08 01 06 00 13 00 02 A5 B 6	Set sensor status change timed reporting
55 CA 08 01 06 00 14 00 02 A5 B6	Set sensor status change reporting 2 times
55 CA 08 01 06 00 15 00 0A A5 B6	Set sensor to report 'person detected' status every 10 seconds
55 CA 08 01 06 00 16 00 0A A5 B6	Set sensor to report 'no person detected' status every 10 seconds
55 CA 08 01 06 00 17 00 1E A5 B 6	Set sensor response code additional delay to 30ms
55 CA 08 01 06 00 66 00 0A A5 B6	Set person confirmation time to 1 second
55 CA 08 01 06 00 67 00 3C A5 B6	Set no person delay hold time to 60 seconds
55 CA 08 01 06 0 0 68 00 64 A5	Set sensor illumination threshold low

B6	value to 50lux	
55 CA 08 01 06 0 0 69 03 E8 A5 B6	Set sensor illumination threshold high value to 1000lux	
55 CA 08 01 06 00 6A 00 32 A5 B6	Set illumination reporting frequency percentage to 50%	
55 CA 08 01 06 00 6B 00 01 A5 B6	Enable sensor illumination detection	
55 CA 08 01 06 0 0 6B 00 02 A5 B6	Disable sensor illumination detection	

Example 3: Read-only General Input Register (Example ID=01)

Host->Sensor	Description	Detailed Explanation
55 CA 08 01 04 00 01 00 01 A5 B6	Read Switch Light Scene	P180
55 CA 08 01 04 00 02 00 01 A5 B6	Read Induction Status	
55 CA 08 01 04 00 03 00 01 A5 B6	Read Action Amplitude	
55 CA 08 01 04 00 04 00 01 A5 B6	Read Real-time Illuminance	
55 CA 08 01 04 00 05 00 01 A5 B6	Read Real-time Illuminance Level	

Example 4: 24G Sensor Settings (Example ID=01)

Host->Sensor	Description	Detailed Explanation
55 CA 08 01 06 00 6C 00 01 A5 B6	Set Radar Working Mode to Detect Only Movement	P104
55 CA 08 01 06 00 6C 00 02 A5 B6	Set Radar Working Mode to Detect Movement + Stationary	
55 CA 08 01 06 00 6D 01 2C A5 B6	Set Radar Detection Maximum Distance to 3.0 meters	
55 CA 08 01 06 00 6E 00 41 A5	Set Radar Detection Maximum Detection	

B6	Distance to 65%	
55 CA 08 01 06 00 6F 00 3C A5 B6	Set Radar Detection Sensitivity to 60%	

Example 5: ToF Sensor Settings (Example ID=01)

Host->Sensor	Description	Detailed Explanation
55 CA 0D 01 10 00 A2 00 02 04 00 00 00 64 A5 B6	Set Segment A Detection Starting Distance to 0 cm, Ending Distance to 100 cm	P120
55 CA 0D 01 10 00 A2 00 02 04 00 64 00 C8 A5 B6	Set the starting detection distance for section B to 100 centimeters and the ending distance to 200 centimeters	
55 CA 08 01 06 00 A6 00 32 A5 B6	Set the near trigger distance to 50 centimeters	
55 CA 08 01 06 00 A7 00 C8 A5 B6	Set the far trigger distance to 200 centimeters	
55 CA 0D 01 10 00 A6 00 02 04 00 32 00 96 A5 B6	The near trigger distance is 50 centimeters, and the far trigger distance is 150 centimeters	
55 CA 08 01 06 00 A8 00 05 A5 B6	Set the limiting time for near and far triggers to 5 seconds	
55 CA 0F 01 10 00 A9 00 03 06 00 50 00 64 00 6E A5 B6	Set the trigger distance for section A to 80 centimeters, section B to 100 centimeters, and section C to 110 centimeters	
55 CA 0F 01 10 00 AC 00 03 06 00 05 00 06 00 08 A5 B6	Set the retention time for section A trigger to 5 seconds, section B trigger to 6 seconds, and section C trigger retention time to 8 seconds	

Example 6: 60G Sensor Settings (Example ID=01)

Host->Sensor	Description	Detailed Explanation
55 CA 08 01 06 00 1D 00 02 A5 B6	Set dry contact output mode to manual mode (default is automatic)	P136
55 CA 08 01 06 00 1E 00 01 A5	Set dry contact forced output time to 1	

B6	minute	
55 CA 08 01 06 00 1F 00 01 A5 B6	Set dry contact output status to exist	
55 CA 08 01 06 00 1F 00 04 A5 B6	Set dry contact output status to return to bed	
55 CA 08 01 06 00 20 00 02 A5 B6	Set dry contact output mode to normally closed mode	
55 CA 08 01 06 00 20 00 03 A5 B6	Set dry contact output mode to normally open pulse mode	
55 CA 08 01 06 00 91 00 1B A5 B6	Set sensor installation height to 2.7 meters	
55 CA 08 01 06 00 92 00 1E A5 B6	Set detection range X-axis length to 3.0 meters	
55 CA 08 01 06 00 93 00 1E A5 B6	Set detection range Y-axis length to 3.0 meters	
55 CA 08 01 06 00 83 00 3C A5 B6	Detection micro-motion sensitivity is 60%	
55 CA 08 01 06 00 84 00 46 A5 B6	Detection micro-motion sensitivity is 70%	
55 CA 08 01 06 00 86 00 0A A5 B6	Set fall detection alarm timing to 10 seconds	
55 CA 08 01 06 00 89 00 14 A5 B6	Set bed width to 2.0 meters	
55 CA 08 01 06 00 8A 00 16 A5 B6	Set bed length to 2.2 meters	
55 CA 08 01 06 00 8B 00 06 A5 B6	Set bed height to 0.6 meters	
55 CA 08 01 06 00 85 00 0A A5 B6	Set distance to exit position to 1.0 meters	

Directory

1. Protocol Description 10	13
2. Communication Method 10	13
2.1. Physical Connection 10	13
2.2. Communication Parameters 11	15
2.3. Address Setting 11	15
3. Data Format 12	16
3.1. Terminology Explanation 12	16
3.2. Command Issuance 13	17
3.3. Data Reporting 13	17
3.4. Function Code Description 14	19
3.5. Frame Format 16	22
3.5.1. Read Single Holding Register 16	22
3.5.2. Read Multiple Holding Registers with Continuous Addresses 17	24
3.5.3. Read Multiple Holding Registers with Non-Continuous Addresses 18	25
3.5.4. Active Reporting of a Single Holding Register 20	28
3.5.5. Active Reporting of Multiple Holding Registers with Non-Continuous Addresses 21	29
3.5.6. Write a Single Holding Register 22	31
3.5.7. Write Multiple Holding Registers with Continuous Addresses 23	33
3.5.8. Write Multiple Holding Registers with Non-Continuous Addresses 25	36
3.5.9. Read a Single Input Register 26	38
3.5.10. Read Multiple Input Registers with Continuous Addresses 27	40
3.5.11. Read multiple non-contiguous input register addresses 29	42
3.5.12. Actively report a single input register 31	45
3.5.13. Query the set active reporting registers 32	46
3.5.14. Set a single active reporting register and delete the rest 33	47
3.5.15. Set multiple active reporting registers and delete the rest 35	50
3.5.16. Add a single active reporting register and keep the rest unchanged 37	53
3.5.17. Add multiple active reporting registers and keep the rest unchanged 39	56
3.5.18. Delete a single active reporting register 41	58
3.5.19. Delete multiple active reporting registers 43	61
3.5.20. Delete all active reporting registers 45	64

3.5.21. Query 1 active reporting register address 46	66
3.6. Get sensor status method 48	69
4. Active Reporting 49	70
4.1. Active Reporting General Input Register 49	70
4.2. Active Reporting General Input Register Function Description 50	71
5. Read and Write General Holding Register 51	73
5.1. Set Sensor Communication ID 51	73
5.2. Clear Device Fault Code 53	76
5.3. Set Sensor Restore Factory Default Parameters 55	78
5.4. Set Sensor Pause Usage Status Hold 57	80
5.5. Set Sensor Pause Usage Status Clear 59	82
5.6. Set Sensor System Total Power On/Off Status Clear 61	84
5.7. Set Sensor Indicator Light Insertion Mode 63	86
5.8. Set Sensor Indicator Light Working Mode 65	89
5.9. Set Sensor Communication Protocol Mode 67	91
5.10. Set Sensor Status Change Active Reporting Format 69	93
5.11. Set Sensor Status Change Reporting Count 71	95
5.12. Set Sensor Timed Reporting for Someone Status Time 73	97
5.13. Set Sensor Timed Reporting for No One Status Time 75	99
5.14. Set Sensor Response Additional Delay 77	101
5.15. Set Sensor Check Method 79	104
5.16. Set Sensor Message End Character Method 81	107
5.17. Set Sensor Communication Baud Rate 83	110
5.18. Set Sensor Communication Check Bit 85	112
5.19. Set Sensor Communication Stop Bit 87	115
5.20. Set Sensor Installation Method 89	118
5.21. Set Sensor Detection Confirmation Time for Someone 91	121
5.22. Set Sensor Delay Hold Time 93	124
5.23. Set Sensor Illumination Threshold Low Value 95	127
5.24. Set Sensor Illumination Threshold High Value 97	130
5.25. Set Sensor Illuminance Reporting Frequency Percentage 99	133
5.26. Set Sensor to Detect Illumination 101	136
5.27. Set Sensor Call Parameters 103	139
6. Read/Write 24G Holding Register 105	142
6.1. Set Sensor Working Mode 105	142

6.2. Set Sensor Detection Distance 107	145
6.3. Set Sensor Detection Distance Percentage 109	148
6.4. Set sensor detection sensitivity 111	151
6.5. Set whether the sensor enables life recognition enhancement mode 113154	
6.6. Set sensor motion detection sensitivity for each distance segment 115 .. 157	
6.7. Set sensor stationary detection sensitivity for each distance segment 118161	
7. Read and write ToF holding register 121	165
7.1. Set sensor A segment detection starting distance and ending distance 121165	
7.2. Set sensor B segment detection starting distance and ending distance 123169	
7.3. Set sensor approach trigger near distance 125	173
7.4. Set sensor move away trigger far distance 127	176
7.5. Set the trigger time limit for the sensor's approach and retreat 129	179
7.6. Set the multi-segment trigger distance length for the sensor 131	182
7.7. Set the multi-segment detection trigger time for the sensor 133	185
7.8. Set the detection distance mode for the sensor 135	189
8. Read and write 60G holding register 137	192
8.1. Set the sensor's dry contact output control mode 137	192
8.2. Set the forced output time for the sensor's dry contact 139	195
8.3. Set the output status of the sensor's dry contact 141	198
8.4. Set the output mode of the sensor's dry contact 143	200
8.5. Set the manual control switch for the sensor's dry contact output 145 ..	203
8.6. Set the installation height of the sensor 147	206
8.7. Set sensor detection range X-axis length 149	209
8.8. Set sensor detection range Y-axis length 151	212
8.9. Set sensor detection motion sensitivity 153	215
8.10. Set sensor detection stationary sensitivity 155	218
8.11. Set sensor detection fall alarm timing 157	221
8.12. Set sensor detection height after a person falls 159	224
8.13. Set sensor detection slide distance after a person falls 161	228
8.14. Set sensor detection width of the bed 163	232
8.15. Set sensor detection length of the bed 165	235
8.16. Set the sensor detection bed height to 167	238
8.17. Set the sensor detection distance from the bed trigger to 169	241
8.18. Set the sensor installation deviation from the bed center X-axis distance to 171	244

- 8.19. Set the sensor installation deviation from the bed center Y-axis distance to 173 247
- 8.20. Set the sensor detection trigger count for the height from the bed to 175251
- 8.21. Set the distance from the sensor installation to the exit position to 177 254
- 8.22. Set the sensor detection width of the exit to 179 258

9. Read-only General Input Register 181	261
9.1. Read if the sensor detection meets the scenario 181	261
9.2. Read sensor detection for presence of someone 183	264
9.3. Read sensor detection for real-time illuminance 185	266
9.4. Read sensor model 187	268
9.5. Read sensor version number 189	271
9.6. Read sensor power-on count 191	273
9.7. Read sensor fault count 193	275
Appendix: Register Address Function Correspondence Table 195	277
Read and Write Holding Register 195	277
Read-Only Input Register 202	288

Version Iteration

Protocol Version	Update Time	Content Remarks
V1.0.1	2024.08.20	Active Coding RS485 Interface Protocol

1. Protocol Description

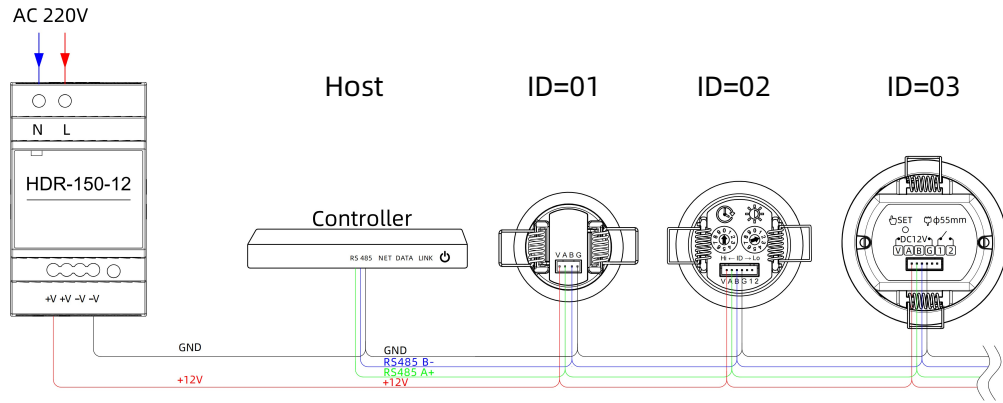
- This protocol supports the entire series of Creatrol RS 485 sensor products. The protocol update time is August 20, 2024. RS 485 products released before this date are not supported by this protocol. For product production cycles, please check the serial number on the product body or contact our company for confirmation.
- If you encounter any unknown functions during the protocol docking process, please contact us in a timely manner.
- The functions and interfaces reserved in the protocol are currently unsupported series; the product will provide explanations during the upgrade process, and the protocol updates will be based on the released version.
- The value range of the holding register and input register varies depending on the product type; if you have any questions, please confirm with our company in a timely manner.
- We also welcome everyone to provide valuable suggestions to our company during the usage process.
- For installation methods, wiring, and precautions, please refer to the product user manual.

2. Communication Method

2.1. Physical Connection

This system adopts a standard RS485 bus topology, where the master control device forms a daisy chain connection with multiple sensors.

The sensor power supply voltage is DC12~30V, the system connection is as shown in the figure below:

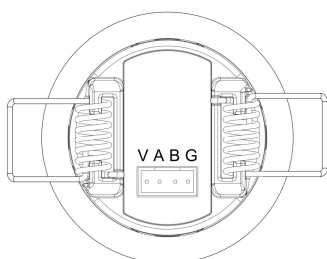


2.2. Communication Parameters

Communication Parameters			
Mode	RS485		
Baud Rate	9600 (Factory Default Value)	Data Bits	8
Stop Bits	1	Check bit	None

2.3. Address Setting

- Use a flathead screwdriver to rotate the knob on the back of the sensor; the knob number represents the sensor address in decimal, adjustable range from 01 to 70 (0x01 to 0x46), each sensor address on the same bus must be unique
- You can use any one of your available set-top box remote controls to set the sensor's communication ID, address range 01~99 (0x01~0x63), each sensor address on the same bus must be unique

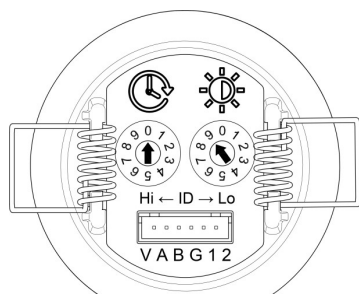


Set ID to 01 (0x01):

Remote control input *0#1# (Indicator light blinks quickly for 1 second to indicate successful save)

Query ID

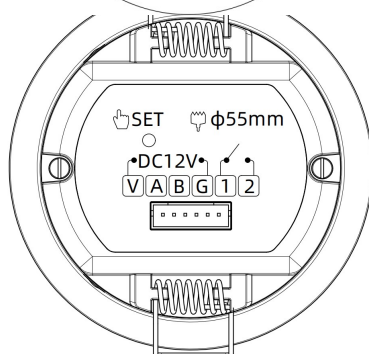
Remote control input *0##



Use a flathead screwdriver to rotate the knob on the back of the sensor; the knob number represents the sensor address in decimal

Set ID to 09 (0x09):

Set the back code dial 'Hi' to 0, 'Lo' to 9 (Indicator light blinks quickly for 1 second to indicate successful save)



Set ID to 011 (0x0B):

Remote control input *0#11# (Indicator light blinks quickly for 1 second to indicate successful save)

Query ID

Remote control input *0##

3. Data Format

3.1. Glossary

Parameter	Description	Remarks
Frame Header	Fixed Format 0x55	
Controller	Master control system, host, main processor, code: C	
Sensor	Sensor, code: A	
Transmission direction	0xCA: Controller sends to sensor 0xAC: Sensor sends to Controller	
Transmission bytes	The number of all data excluding frame header (0x55 0xCA or 0x55 0xAC) and transmission bytes	
RS485 Address	The 485 address of the sensor, referred to as ID, range 0x01~0x63 (i.e., 1~99)	
Function Code	Data frame functions, such as reading registers, writing registers, etc.	0x00~0xFF, [3.4]
Register Address	Address of the register to read or write	
Data Format	High byte first, low byte second	
Holding Register	Sensor configuration data, such as detection range, sensitivity, delay, etc. (readable and writable)	Limit single read/write to 1~100 registers
Input Register	Sensor detection status, such as fall, someone, no one, illuminance value, etc. (read-only)	Limit single read/write to 1~100 registers
Checksum	Sum of all data except (check bit and frame tail) Checksum-8 Take the low eight bits of data	
Wildcard checksum	Fixed to 0xA5, effectively replaces checksum, no need for cumulative calculation during testing	
Fixed checksum	Data reporting does not require calculation, can be set to a fixed format	
Frame tail	Fixed format 0xB6	

3.2. Command issuance

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x00~0xFF, see the table below [3.4]
BYTE-5	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Low byte of register address	
BYTE-7	Data 1 high byte	See frame format [3.5]
BYTE-8	Data 1 low byte	
BYTE-8+1	Data N high byte	
BYTE-8+2	Data N low byte	
BYTE-8+3	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-8+N	Frame tail identifier	0xB6

3.3. Data reporting

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x00~0xFF, see the table below [3.4]
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Data 1 high byte	See frame format [3.5]
BYTE-8	Data 1 low byte	
BYTE-8+1	Data N high byte	
BYTE-8+2	Data N low byte	
BYTE-8+3	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8+2
BYTE-8+N	Frame tail identifier	0xB6

3.4. Function code description

Function Code	Description	Send Direction	Example of Sending Code
0x03	Read Single Holding Register	Host->Sensor	55 CA 08 01 03 00 67 00 01 A5 B6
		Sensor -> Host	55 AC 07 01 03 02 00 0C 1A B6
	Read Multiple Holding Registers Continuous Address	Host->Sensor	55 CA 08 01 03 00 83 00 02 A5 B6
		Sensor -> Host	55 AC 09 01 03 04 00 32 00 1E 62 B6
0x43	Read Multiple Holding Registers Non-continuous Address	Host->Sensor	55 CA 0A 01 43 00 0B 00 0F 00 1A A5 B6
		Sensor -> Host	55 AC 10 01 83 00 0B 00 00 00 0F 00 01 00 0A 00 04 BE B6
0x83	Report Single (Active/Passive Response) Non-continuous Holding Register Address	Sensor -> Host	55 AC 08 01 83 00 03 22 23 D5 B6
		Sensor -> Host	55 AC 0C 01 83 00 03 22 23 00 68 00 64 A5 B6
0x06	Write Single Holding Register	Host->Sensor	55 CA 08 01 06 00 86 00 01 A5 B6
		Sensor -> Host	55 AC 08 01 06 00 86 00 01 97 B6
0x10	Write Multiple Holding Registers Continuous Address	Host->Sensor	55 CA 0D 01 10 00 83 00 02 04 00 25 00 29 A5 B6
		Sensor -> Host	55 AC 08 01 10 00 83 00 02 9F B6
0x46	Write Multiple Holding Registers Non-continuous Address	Host->Sensor	55 CA 10 01 46 00 0F 00 02 00 10 00 05 00 1A 00 05 A5 B6
		Sensor -> Host	55 AC 10 01 83 00 0F 00 02 00 10 00 05 00 1A 00 05 DA B6
0x04	Read Single Input Register	Host->Sensor	55 CA 08 01 04 00 02 00 01 A5 B6
		Sensor -> Host	55 AC 07 01 04 02 00 01 10 B6
	Read Multiple Input Registers Continuous	Host->Sensor	55 CA 08 01 04 00 07 00 02 A5 B6
		Sensor -> Host	55 AC 09 01 04 04 00 02 00 03 18 B6

	Address		
0x44	Read Multiple Input Registers Non-continuous Address	Host->Sensor	55 CA 0A 01 44 00 01 00 03 00 07 A5 B6
		Sensor -> Host	55 AC 10 01 81 00 01 00 01 00 03 00 01 00 07 00 03 A3 B6
0x81	Active Report Single Input Register	Sensor -> Host	55 AC 08 01 81 00 01 00 00 8C B6
0x90	Query Set Active Reporting Register Address Number	Host->Sensor	55 CA 06 01 90 00 03 A5 B6
		Sensor -> Host	55 AC 0E 01 90 00 03 00 03 00 01 00 04 00 07 B2 B6



0x91	Set Single Active Reporting Register Address, Delete Others	Host->Sensor	55 CA 08 01 91 00 03 00 02 A5 B6
		Sensor -> Host	55 AC 0A 01 90 00 03 00 01 00 02 A2 B6
	Set Multiple Active Reporting Register Addresses, Delete Others	Host->Sensor	55 CA 0A 01 91 00 03 00 02 00 03 A5 B6
		Sensor -> Host	55 AC 0C 01 90 00 03 00 02 00 02 00 03 A8 B6
0x92	Add Single Active Reporting Register Address, Keep Others Unchanged	Host->Sensor	55 CA 08 01 92 00 03 00 01 A5 B6
		Sensor -> Host	55 AC 0A 01 90 00 03 00 01 00 01 A1 B6
	Add Multiple Active Reporting Register Addresses, Keep Others Unchanged	Host->Sensor	55 CA 0C 01 92 00 03 00 03 00 04 00 07 A5 B6
		Sensor -> Host	55 AC 0E 01 90 00 03 00 03 00 03 00 04 00 07 B4 B6
0x93	Delete a single active reporting register address	Host->Sensor	55 CA 08 01 93 00 03 00 01 A5 B6
		Sensor -> Host	55 AC 0A 01 90 00 03 00 01 00 01 A1 B6
	Delete multiple active reporting register addresses	Host->Sensor	55 CA 0A 01 93 00 03 00 01 00 03 A5 B6
		Sensor -> Host	55 AC 0C 01 90 00 03 00 02 00 01 00 03 A7 B6
0x94	Delete all active reporting register addresses	Host->Sensor	55 CA 06 01 94 00 03 A5 B6
		Sensor -> Host	55 AC 08 01 90 00 03 00 00 9D B6
0x95	Query 1 active reporting register address	Host->Sensor	55 CA 08 01 95 00 03 00 02 A5 B6
		Sensor -> Host	55 AC 0A 01 90 00 03 00 02 00 01 A7 B6

3.5. Frame format

3.5.1. Read Single Holding Register

Host->Sensor

Function Code	0x03	Read Single Holding Register
Byte sequence	Function	Detailed description
BYTE-9	Frame header identifier	0x55
BYTE-10	Direction identifier	0xCA: Host sends to sensor
BYTE-11	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-12	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-13	Function Code	0x03
BYTE-14	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-15	Low byte of register address	
BYTE-16	Register count high byte	0x0001
BYTE-17	Register count low byte	
BYTE-18	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-19	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x03
BYTE-5	Number of data items	0x01~0xFF
BYTE-6	Data high byte	0x0000~0xFFFF



BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read ID=01 sensor, starting from holding register address 0x001A read
1

Host->Sensor

55 CA 08 01 03 00 1A 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 04** 12 B6 # Sensor response 00 14 indicates read success

3.5.2.Read multiple holding register addresses consecutively

Host->Sensor

Function Code	0x03	Read multiple holding register addresses consecutively
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x03
BYTE-5	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001~0x0064
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the

		broadcast address
BYTE-4	Function Code	0x03
BYTE-5	Number of data items	Data N high byte + Data N low byte
BYTE-6	Data N high byte	0x0000~0xFFFF
BYTE-7	Data N low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read ID=01 sensor, starting from holding register address 0x0065 read 3 consecutive register addresses

Host->Sensor

55 CA 08 01 03 00 65 00 03 A5 B6

Sensor -> Host

55 AC 0B 01 03 06 **00 00 00 0A 00 1E** 3E B6 #Sensor response 00 00 00 0A 00 1E indicates read success

3.5.3. Read multiple holding register addresses that are not continuous

Host->Sensor

Function Code	0x43	Read multiple holding register addresses that are not continuous
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x43
BYTE-5	Register Address 1 High Byte	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register Address 2 High Byte	0x0001~0xFFFF
BYTE-8	Register Address 2 Low Byte	

BYTE-9	Register Address N High Byte	0x0001~0xFFFF
BYTE-10	Register Address N Low Byte	
BYTE-11	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-12	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x83
BYTE-5	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register 1 Data High Byte	0x0000~0xFFFF
BYTE-8	Register 1 Data Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register 2 Data High Byte	0x0000~0xFFFF
BYTE-12	Register 2 Data Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Register N Data High Byte	0x0000~0xFFFF

BYTE-16	Register N Data Low Byte	
BYTE-17	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-16
BYTE-18	Frame tail identifier	0xB6

[Example 1] Read ID=01 sensor, starting from holding register address 0x000B to read 3 non-continuous register addresses

Host->Sensor

55 CA 0A 01 43 00 0B 00 0F 00 1A A5 B6

Sensor -> Host

55 AC 10 01 83 **00 0B 00 00 00 0F 00 01 00 0A 00 04** BE B6 #Sensor Response 00 0B 00 00 00 0F 00 01 00 0A 00 04 indicates read success

3.5.4.Active Reporting of a Single Holding Register

Sensor -> Host

Function Code	0x83	Reporting a Single Holding Register
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x83
BYTE-5	Register Address 1 High Byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register 1 Data High Byte	0x0000~0xFFFF
BYTE-8	Register 1 Data Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] ID=01 Sensor, Active Reporting of 1 Holding Register

Sensor -> Host

55 AC 08 01 83 **00 10 00 04** A1 B6

3.5.5.Active Reporting of Multiple Non-Continuous Holding Register Addresses

Sensor -> Host

Function Code	0x83	Reporting Multiple Non-Continuous Holding Register Addresses
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x83
BYTE-5	Register Address 1 High Byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register 1 Data High Byte	0x0000~0xFFFF
BYTE-8	Register 1 Data Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register 2 Data High Byte	0x0000~0xFFFF
BYTE-12	Register 2 Data Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Register N Data High Byte	0x0000~0xFFFF
BYTE-16	Register N Data Low Byte	

BYTE-17	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-16
BYTE-18	Frame tail identifier	0xB6

[Example 1] ID=01 Sensor, Active Reporting of Multiple Non-Continuous Holding Register Addresses

Sensor -> Host

55 AC 0C 01 83 **00 10 00 04 00 68 00 64** 71 B6

3.5.6. Write Single Holding Register

Host->Sensor

Function Code	0x06	Write Single Holding Register
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, start writing 1 data from holding register address 0x0067

Host->Sensor

55 CA 08 01 06 00 67 00 01 A5 B6

Sensor -> Host

55 AC 08 01 06 00 67 **00 01** 78 B6 #Sensor response 00 01 indicates write successful

3.5.7. Write multiple consecutive holding register addresses

Host->Sensor

Function Code	0x10	Write multiple consecutive holding register addresses
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	Register Starting Address High Byte	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Register Starting Address Low Byte	
BYTE-7	Register count high byte	0x0001~0x0064
BYTE-8	Register count low byte	
BYTE-9	Number of Bytes to Write	0x01~0xFF Data1 High Byte + Data1 Low Byte + DataN Low Byte
BYTE-10	Data 1 high byte	0x0000~0xFFFF
BYTE-11	Data 1 low byte	
BYTE-12	Data2 High Byte	0x0000~0xFFFF
BYTE-13	Data2 Low Byte	
BYTE-14	Data N high byte	0x0000~0xFFFF

BYTE-15	Data N low byte	
BYTE-16	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-17	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	Register Starting Address High Byte	0x0001~0xFFFF
BYTE-6	Register Starting Address Low Byte	
BYTE-7	Register count high byte	0x0001~0x0064
BYTE-8	Register count low byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, start writing 3 consecutive addresses from holding register address 0x0091

Host->Sensor

55 CA 0F 01 10 00 91 00 03 06 00 1B 00 1E 00 32 A5 B6

Sensor -> Host

55 AC 08 01 10 00 91 **00 03** AE B6 #Sensor response 00 03 indicates write successful

3.5.8. Write multiple holding register addresses that are not continuous

Host->Sensor

Function Code	0x46	Write multiple holding register addresses that are not continuous
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x46
BYTE-5	Register Address 1 High Byte	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register 1 Data High Byte	0x0001~0x0064
BYTE-8	Register 1 Data Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register 2 Data High Byte	0x0000~0xFFFF
BYTE-12	Register 2 Data Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Register N Data High Byte	0x0000~0xFFFF
BYTE-16	Register N Data Low Byte	
BYTE-17	Checksum	0xA5: Cumulative checksum/Wildcard check

BYTE-18	Frame tail identifier	0xB6
---------	-----------------------	------

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x83
BYTE-5	Register Address 1 High Byte	0x0001~0xFFFF
BYTE-6	Register Address 1 Low Byte	

BYTE-7	Register 1 Data High Byte	0x0000~0xFFFF
BYTE-8	Register 1 Data Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register 2 Data High Byte	0x0000~0xFFFF
BYTE-12	Register 2 Data Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Register N Data High Byte	0x0000~0xFFFF
BYTE-16	Register N Data Low Byte	
BYTE-17	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-16
BYTE-18	Frame tail identifier	0xB6

[Example 1] Write ID=01 sensor, starting from holding register address 0x000F to write 3 non-continuous addresses

Host->Sensor

55 CA 10 01 46 00 0F 00 02 00 10 00 05 00 1A 00 05 A5 B6

Sensor -> Host

55 AC 10 01 83 **00 0F 00 02 00 10 00 05 00 1A 00 05** DA B6 #Sensor Response 00 0F 00 02 00 10 00 05 00 1A 00 05 indicates write success

3.5.9.Read Single Input Register

Host->Sensor

Function Code	0x04	Read Single Input Register
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55

BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000~0xFFFF
BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read ID=01 sensor, starting from input register address 0x0001 to read 1 register

Host->Sensor

55 CA 08 01 04 00 01 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **00 00** 0F B6 #Sensor Response 00 00 indicates read success

3.5.10. Read multiple input register addresses continuously

Host->Sensor

Function Code	0x04	Read multiple input register addresses continuously
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001~0x0064
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x01~0xFF Data1 High Byte + Data1 Low Byte + DataN Low Byte

BYTE-6	Data N high byte	0x0000~0xFFFF
BYTE-7	Data N low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read ID=01 sensor, start reading 2 input registers from input register address 0x0002

Host->Sensor

55 CA 08 01 04 00 02 00 02 A5 B6

Sensor -> Host

55 AC 09 01 04 04 **00 01 00 02** 16 B6 #Sensor response 00 01 00 02 indicates read success

3.5.11. Read multiple input registers with non-continuous addresses

Host->Sensor

Function Code	0x44	Read multiple input registers with non-continuous addresses
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x44
BYTE-5	Register Address 1 High Byte	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register Address 2 High Byte	0x0001~0xFFFF
BYTE-8	Register Address 2 Low Byte	
BYTE-9	Register Address N High Byte	0x0001~0xFFFF
BYTE-10	Register Address N Low Byte	
BYTE-11	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-12	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address

BYTE-4	Function Code	0x81
BYTE-5	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-6	Register Address 1 Low Byte	
BYTE-7	Register 1 Data High Byte	0x0000~0xFFFF
BYTE-8	Register 1 Data Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register 2 Data High Byte	0x0000~0xFFFF
BYTE-12	Register 2 Data Low Byte	

BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Register N Data High Byte	0x0000~0xFFFF
BYTE-16	Register N Data Low Byte	
BYTE-17	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-16
BYTE-18	Frame tail identifier	0xB6

[Example 1] Read ID=01 sensor, start reading 3 input registers from register addresses 0x0001, 0x0003, 0x0007

Host->Sensor

55 CA 0A 01 44 00 01 00 03 00 07 A5 B6

Sensor -> Host

55 AC 10 01 81 **00 01 00 01 00 03 00 01 00 07 00 03** A3 B6 #Sensor response
 00 01 00 01 00 03 00 01 00 07 00 03 indicates read success

3.5.12.Active Report Single Input Register

Sensor -> Host

Function Code	0x81	Active report of 1 input register
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x81: Active report of a single input register
BYTE-5	High byte of register address	0x0001~0xFFFF: Example 0x0008 (00: high, 08: low)
BYTE-6	Low byte of register address	
BYTE-7	Register data high byte	0x0000~0xFFFF
BYTE-8	Register data low byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] ID=01 Sensor, active report of a single input register

Sensor -> Host

55 AC 08 01 81 00 03 **00 02** 90 B6

3.5.13. Query the set active reporting registers

Host->Sensor

Function Code	0x90	Query the set active reporting registers
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0003: Input Register
BYTE-6	Register type low byte	0x0004: Holding Register
BYTE-7	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-8	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	
BYTE-9	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 1 Low Byte	

BYTE-11	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-12	Register Address 2 Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-14
BYTE-16	Frame tail identifier	0xB6

[Example 1] Read ID=01 Sensor, how many active reported input registers

Host->Sensor

55 CA 06 01 90 00 03 A5 B6

Sensor -> Host

55 AC 0E 01 90 **00 03 00 03 00 01 00 04 00 07** B2 B6 # Sensor response 00 03 00
 03 00 01 00 04 00 07 indicates read success

3.5.14.Set One Active Reporting Register and delete the rest

Host->Sensor

Function Code	0x91	Set 1 Active Reporting Register and delete the rest
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x91
BYTE-5	Register type high byte	0x0003: Input Register
BYTE-6	Register type low byte	0x0004: Holding Register
BYTE-7	High byte of register address	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Low byte of register address	

BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	

BYTE-9	High byte of register address	0x0000~0xFFFF
BYTE-10	Low byte of register address	
BYTE-11	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-10
BYTE-12	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, Active Reporting of 1 Input Register Address 0x0002

Host->Sensor

55 CA 08 01 91 00 03 00 02 A5 B6

Sensor -> Host

55 AC 0A 01 90 00 03 00 01 **00 02** A2 B6 #Sensor Response 00 02 indicates Write Successful

3.5.15. Set multiple Active Reporting Registers and delete the rest

Host->Sensor

Function Code	0x91	Set multiple Active Reporting Registers and delete the rest
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x91
BYTE-5	Register type high byte	0x0003: Input Register
BYTE-6	Register type low byte	0x0004: Holding Register
BYTE-7	Register Address 1 High Byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Register Address 1 Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register Address N High Byte	0x0000~0xFFFF
BYTE-12	Register Address N Low Byte	
BYTE-13	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-14	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail

BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	

BYTE-9	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 1 Low Byte	
BYTE-11	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-12	Register Address 2 Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-14
BYTE-16	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, Active Reporting of 2 Input Register Addresses
 0x0002, 0x0003

Host->Sensor

55 CA 0A 01 91 00 03 00 02 00 03 A5 B6

Sensor -> Host

55 AC 0C 01 90 00 03 00 02 **00 02 00 03** A8 B6 #Sensor Response 00 02 00 03
 indicates Write Successful

3.5.16. Add one active reporting register while keeping the others unchanged

Host->Sensor

Function Code	0x92	Add 1 active reporting register while keeping the others unchanged
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x92
BYTE-5	Register type high byte	0x0003: Input Register 0x0004: Holding Register
BYTE-6	Register type low byte	
BYTE-7	High byte of register address	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Low byte of register address	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF

BYTE-8	Register count low byte	
BYTE-9	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 1 Low Byte	
BYTE-11	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-12	Register Address 2 Low Byte	

BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-14
BYTE-16	Frame tail identifier	0xB6

[Example 1] Write ID=01 sensor, active reporting of 1 input register address 0x0001

Host->Sensor

55 CA 08 01 92 00 03 00 01 A5 B6

Sensor -> Host

55 AC 0A 01 90 00 03 00 01 **00 01** A1 B6 #Sensor response 00 01 indicates write successful, currently there is 1 input register in active reporting.

Sensor -> Host

55 AC 0E 01 90 00 03 00 03 **00 01 00 02 00 03** AC B6 #Sensor response 00 01 00 02 00 03: indicates write successful, currently there are 3 input registers in active reporting.

3.5.17. Add multiple active reporting registers while keeping the rest unchanged

Host->Sensor

Function Code	0x92	Add multiple active reporting registers while keeping the rest unchanged
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x92
BYTE-5	Register type high byte	0x0003: Input Register
BYTE-6	Register type low byte	0x0004: Holding Register
BYTE-7	Register Address 1 High Byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Register Address 1 Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register Address N High Byte	0x0000~0xFFFF
BYTE-12	Register Address N Low Byte	
BYTE-13	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-14	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to

		frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	
BYTE-9	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 1 Low Byte	
BYTE-11	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-12	Register Address 2 Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-14
BYTE-16	Frame tail identifier	0xB6

[Example 1] Write ID=01 sensor, actively report 3 input register addresses 0x0003, 0x0004, 0x0007

Host->Sensor

55 CA 0C 01 92 00 03 00 03 00 04 00 07 A5 B6

Sensor -> Host

55 AC 0E 01 90 00 03 **00 03 00 03 00 04 00 07** B4 B6 #Sensor response 00 03 00 04 00 07 indicates write successful, currently there are 3 input registers actively reporting.

Sensor -> Host

55 AC 12 01 90 00 03 00 05 **00 01 00 02 00 03 00 04 00 05** BB B6 #Sensor response 00 01 00 02 00 03 00 04 00 05 indicates write successful, currently there are 5 input registers actively reporting.

3.5.18.Delete a Single Active Reporting Register

Host->Sensor

Function Code	0x93	Delete 1 Active Reporting Register
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x93
BYTE-5	Register type high byte	0x0003: Input Register 0x0004: Holding Register
BYTE-6	Register type low byte	
BYTE-7	High byte of register address	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Low byte of register address	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	

BYTE-9	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 1 Low Byte	
BYTE-11	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-12	Register Address 2 Low Byte	

BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-14
BYTE-16	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, Delete 1 Active Reporting Input Register Address 0x0001

Host->Sensor

55 CA 08 01 93 00 03 00 01 A5 B6

Sensor -> Host

55 AC 08 01 90 00 03 **00 00** 9D B6 #Sensor Response 00 00 indicates write successful, Deleted 1 Active Reporting Input Register, remaining 0 Active Reporting Input Registers.

Sensor -> Host

55 AC 10 01 90 00 03 00 04 **00 02 00 03 00 04 00 05** B7 B6 #Sensor Response 00 02 00 03 00 04 00 05 indicates write successful, deleted 1 Active Reporting Input Register, remaining 4 Active Reporting Input Registers.

3.5.19.Delete Multiple Active Reporting Registers

Host->Sensor

Function Code	0x93	Delete Multiple Active Reporting Registers
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x93
BYTE-5	Register type high byte	0x0003: Input Register 0x0004: Holding Register
BYTE-6	Register type low byte	
BYTE-7	Register Address 1 High Byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Register Address 1 Low Byte	
BYTE-9	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 2 Low Byte	
BYTE-11	Register Address N High Byte	0x0000~0xFFFF
BYTE-12	Register Address N Low Byte	
BYTE-13	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-14	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail

BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	
BYTE-9	Register Address 1 High Byte	0x0000~0xFFFF
BYTE-10	Register Address 1 Low Byte	

BYTE-11	Register Address 2 High Byte	0x0000~0xFFFF
BYTE-12	Register Address 2 Low Byte	
BYTE-13	Register Address N High Byte	0x0000~0xFFFF
BYTE-14	Register Address N Low Byte	
BYTE-15	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-14
BYTE-16	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, Delete 2 Active Reporting Input Register Addresses
 0x0001, 0x0003

Host->Sensor

55 CA 0A 01 93 00 03 00 01 00 03 A5 B6

Sensor -> Host

55 AC 08 01 90 00 03 **00 00** 9D B6 #Sensor Response 00 00 indicates Write Successful, Deleted 2 Active Reporting Input Registers, remaining 0 Active Reporting Input Registers.

Sensor -> Host

55 AC 0E 01 90 00 03 00 03 **00 02 00 04 00 05** B1 B6 #Sensor Response 00 02 00 04 00 05 indicates Write Successful, Deleted 2 Active Reporting Input Registers, remaining 3 Active Reporting Input Registers.

3.5.20.Delete All Active Reporting Registers

Host->Sensor

Function Code	0x94	Delete All Active Reporting Registers
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x94
BYTE-5	Register type high byte	0x0003: Input Register
BYTE-6	Register type low byte	0x0004: Holding Register
BYTE-7	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-8	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x90
BYTE-5	Register type high byte	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-6	Register type low byte	
BYTE-7	Register count high byte	0x0000~0xFFFF
BYTE-8	Register count low byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Write ID=01 Sensor, Delete All Active Reporting Input Registers

Host->Sensor

55 CA 06 01 94 00 03 A5 B6

Sensor -> Host

55 AC 08 01 90 00 03 **00 00** 9D B6 #Sensor Response 00 00 indicates Write Successful

3.5.21. Query 1 active reporting register address

Host->Sensor

Function Code	0x95	Query 1 active reporting register address
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x95
BYTE-5	Register type high byte	0x0003: Input Register 0x0004: Holding Register
BYTE-6	Register type low byte	
BYTE-7	High byte of register address	0x0000~0xFFFF: For example, 0x0008 (00: high, 08: low)
BYTE-8	Low byte of register address	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x95
BYTE-5	Register type high byte	0x0000~0xFFFF
BYTE-6	Register type low byte	
BYTE-7	High byte of register address	0x0000~0xFFFF

BYTE-8	Low byte of register address	
BYTE-9	Reporting Status High Byte	0x0000: Not Reporting 0x0001: Reporting
BYTE-10	Reporting Status Low Byte	
BYTE-11	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-10
BYTE-12	Frame tail identifier	0xB6

[Example 1] Read ID=01 Sensor, Actively Report Input Register Address 0x0002's
Reporting Status

Host->Sensor

55 CA 08 01 95 00 03 00 02 A5 B6

Sensor -> Host

55 AC 0A 01 95 00 03 **00 02 00 01** A7 B6 #Sensor Response 00 02 00 01

indicates Read Successful 0x0002 Allows Reporting

3.6. Methods to Obtain Sensor Status

There are 2 ways to obtain sensor status

Serial Number	Method	Code Sending Conditions	Example
1	Sensor Active Reporting	Induction or Illumination Status Change Actively Send Code For example: No One ->Someone Action Amplitude Change Motion Posture Change Illumination Low->High	Sensor -> Host 55 AC 08 01 81 00 03 00 02 90 B6 [See 4.1]
2	Query Input Register Value (Sensor reports register value in the code format read from the register)	Host Sends Query Code Inductor Replies Status	Host->Sensor 55 CA 08 01 04 00 07 00 01 A5 B6 Sensor -> Host 55 AC 07 01 04 02 00 02 11 B6 [See 9.1]

4. Active Reporting

4.1. Active Reporting General Input Register

Example ID=01

Function Description	Sensor -> Host	Status
Turn On Light/Turn Off Light	55 AC 08 01 81 00 01 00 00 8C B6	Turn Off Light
	55 AC 08 01 81 00 01 00 01 8D B6	Turn On Light
Sensing Status	55 AC 08 01 81 00 02 00 00 8D B6	No One
	55 AC 08 01 81 00 02 00 01 8E B6	Someone
Action Amplitude	55 AC 08 01 81 00 03 00 00 8E B6	No One
	55 AC 08 01 81 00 03 00 01 8F B6	Motion
	55 AC 08 01 81 00 03 00 02 90 B6	Stationary
Real-time Illuminance	55 AC 08 01 81 00 04 01 02 92 B6	258Lux
Illuminance Level	55 AC 08 01 81 00 05 00 00 90 B6	Invalid Value
	55 AC 08 01 81 00 05 00 01 91 B6	Low Illumination
	55 AC 08 01 81 00 05 00 02 92 B6	Medium Illumination
	55 AC 08 01 81 00 05 00 03 93 B6	High Illumination

Active reporting of input registers lists general types; for other actively reported input registers, please refer to [\[Read-Only Input Registers \]](#)

4.2. Active Reporting General Input Register Function

Description

Input Register (0x0001~0x0005)

Register	Function	Judgment Description
0x0001	Turn On Light/Turn Off Light Conditions 0x0000: Turn Off Light 0x0001: Turn On Light	Output 0x0000 (Turn Off Light Condition): Induction of No One or Illumination Condition Meets High Value Output 0x0001 (Turn On Light Condition): Induction of Someone and Illumination Condition Meets Low Value
0x0002	Induction of Someone/No One 0x0000: No One 0x0001: Someone	Output 0x0000 (No One): Detection of no one exceeds the set delay output 0x0001 (Someone): Induction of someone (large motion/micro motion/static + delay)
0x0003	Action Amplitude Real-time Output 0x0000: No One 0x0001: Moving 0x0002: Static	Output 0x0000 (No One): Induction of No One Output 0x0001 (Moving): Someone (and large action amplitude) Output 0x0002 (Static): Someone and small action amplitude or in a static state
0x0004	Illumination Real-time Value Output	0x0000~0x7D00 High Byte * 256 + Low Byte
0x0005	Illumination Level Output 0x0000: Invalid Value 0x0001: Low Illumination 0x0002: Medium Illumination	Output 0x0000 (Invalid Value): Level Not Set Output 0x0001 (Low Illumination): Illumination < Low Value Output 0x0002 (Medium Illumination):

	0x0003: High Illumination	Low Value < Illumination < High Value Output 0x0003 (High Illumination): Illumination > High Value
--	---------------------------	--

For other active reporting input register function descriptions, please refer to [[Read-Only Input Register](#)]

5. Read and Write General Holding Register

- This type of register is suitable for all RS 485 series products

5.1. Set Sensor Communication ID

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0xFF: Broadcast Address
BYTE-4	Function Code	0x03
BYTE-5	High byte of register address	0x0001
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0001~0x0063
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register	0x0001~0xFFFF

	address	
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

Setting ID and reading ID are only applicable when there is only 1 sensor on the RS 485 bus

Setting ID is valid within 5 minutes after the sensor is powered on

[Example 1] Host sets the sensor's communication ID to 05

Host->Sensing

55 CA 08 FF 06 00 01 00 05 A5 B6

Sensor -> Host

55 AC 08 01 06 00 01 00 01 16 B6 #Sensor response: Successfully set parameters

[Example 2] Host reads the sensor's communication ID

Host->Sensing

55 CA 08 FF 03 00 01 00 01 A5 B6

Sensor -> Host

55 AC 07 05 03 02 00 05 17 B6 #Sensor replies ID is 05

5.2. Clear Device Fault Code

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address, 0xFF: Broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0000: Invalid 0x0001: Clear fault code
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 to clear the fault code of the sensor

Host->Sensing

55 CA 08 01 06 00 07 **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 07 00 01 18 B6 #Sensor response: Successfully set
parameters

5.3. Set sensor to restore factory default parameters

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x000A
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Host power-on notification to sensor to report all register statuses
BYTE-8	Register Value Low Byte	0x0002: Start sensor to restore factory default parameters 0x0003: Control sensor to enter factory test mode 0x0004: Control sensor to exit factory test mode 0x0005: Control sensor to enter network configuration mode
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address

BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 to restore factory settings

Host->Sensor

55 CA 08 01 06 00 0A **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0A 00 02 1C B6 #Sensor response: Successfully set parameters

5.4. Set sensor to maintain paused status

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x000B
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Run immediately 0x0001~0x0E10: Sensor paused, maintaining current status, will resume operation after countdown ends 0x270F: Permanently paused Query only response
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor status to maintain for 3 seconds before resuming operation

Host->Sensor

55 CA 08 01 06 00 0B **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0B 00 03 1E B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor to run immediately

Host->Sensor

55 CA 08 01 06 00 0B **00 00** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0B 00 00 1B B6 #Sensor response: Successfully set parameters

[Example 3] Host sets ID=01 sensor to permanently pause operation

Host->Sensor

55 CA 08 01 06 00 0B **27 0F** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0B 27 0F 51 B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the operating status of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 0B 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **27 0F** 44 B6 #Sensor replies: Permanently paused operation

5.5. Set sensor pause status to zero

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x000C
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Power on immediately 0x0001~0x0E10: Sensor power off, reset current status after countdown ends, then power on 0x270F: Permanent shutdown Query only response
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets sensor ID=01 status to zero delay **10 seconds** then power on

Host->Sensor

55 CA 08 01 06 00 0C **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0C 00 0A 26 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor to run immediately

Host->Sensor

55 CA 08 01 06 00 0C **00 00** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0C 00 00 1C B6 #Sensor response: Successfully set parameters

[Example 3] Host sets ID=01 sensor to permanently pause operation

Host->Sensor

55 CA 08 01 06 00 0C **27 0F** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0C 27 0F 52 B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the operating status of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 0C 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 64** 72 B6 #Sensor reply delay **100 seconds** after power on

5.6. Set the sensor system master power on/off status to zero

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x000D
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Power on 0x0002: Shutdown status reset 0x0003: Restart Query only response
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor to shutdown

Host->Sensor

55 CA 08 01 06 00 0D **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0D 00 02 1F B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 for the sensor to power on

Host->Sensor

55 CA 08 01 06 00 0D **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0D 00 01 1E B6 #Sensor response: Successfully set parameters

[Example 3] Host sets ID=01 for the sensor to restart

Host->Sensor

55 CA 08 01 06 00 0D **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0D 00 03 20 B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the operating status of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 0D 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 01** 0F B6 #Sensor replies current status as powered on

5.7. Set sensor indicator light insertion mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x000E
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Exit insertion mode 0x0001: Locate and identify sensor (automatically exits after 30 seconds) 0x0002: Red indicator light always on, do not exit 0x0003: Green indicator light stays on, does not exit 0x0004: Blue indicator light stays on, does not exit 0x0005: Red indicator light blinks slowly once every second, does not exit 0x0006: Green indicator light blinks slowly once every second, does not exit 0x0007: Blue indicator light blinks slowly once every second, does not exit 0x0008: Red indicator light blinks quickly four times every second, does not exit 0x0009: Green indicator light blinks quickly four times every second, does not exit 0x000A: Blue indicator light blinks quickly four times every second, does not exit 0x000B: Red indicator light blinks quickly four times every second, exits
BYTE-8	Register Value Low Byte	

		0x000C: Green indicator light blinks quickly 4 times for 1 second, exit 0x000D: Blue indicator light blinks quickly 4 times for 1 second, exit 0x000E~0x0064: Reserved Indicator light IO control 0xF000 0x01 (bit control) R Red light on 0xF000 0x02 (bit control) G Green light on 0xF000 0x04 (bit control) B Blue light on
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor to start blinking indicator light

Host->Sensor

55 CA 08 01 06 00 0E **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0E 00 02 1F B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor to stop blinking

Host->Sensor

55 CA 08 01 06 00 0E **00 00** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0E 00 01 1E B6 #Sensor response: Successfully set parameters

[Example 3] Host sets the indicator light of the sensor with ID=01 to red, flashing slowly once every second, without exiting

Host->Sensor

55 CA 08 01 06 00 0E **00 05** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0E 00 05 23 B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the working mode of the indicator light of the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 0E 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 05** 13 B6 #Sensor replies that the working mode of the indicator light is red, flashing slowly once every second, without exiting

5.8. Set the working mode of the sensor's indicator light

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-11	Frame header identifier	0x55
BYTE-12	Direction identifier	0xCA: Host sends to sensor
BYTE-13	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-14	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-15	Function Code	0x06
BYTE-16	High byte of register address	0x000F
BYTE-17	Low byte of register address	
BYTE-18	Register Value High Byte	0x0000: Invalid Value 0x0001: Breathing light mode
BYTE-19	Register Value Low Byte	0x0002: Turn off the indicator light 0x0003: Night light mode
BYTE-20	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-21	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-11	Frame header identifier	0x55
BYTE-12	Direction identifier	0xAC: Sent from sensor to host
BYTE-13	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-14	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-15	Function Code	0x06
BYTE-16	High byte of register address	0x0001~0xFFFF
BYTE-17	Low byte of register address	
BYTE-18	Register Value High Byte	0x0000~0xFFFF

BYTE-19	Register Value Low Byte	
BYTE-20	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-21	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 to turn off the indicator light

Host->Sensor

55 CA 08 01 06 00 0F **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0F 00 02 21 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the sensor with ID=01 to breathing light mode

Host->Sensor

55 CA 08 01 06 00 0F **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0F 00 01 20 B6 #Sensor response: Successfully set parameters

[Example 3] Host sets the sensor with ID=01 to night light mode

Host->Sensor

55 CA 08 01 06 00 0F **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 0F 00 03 22 B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the working mode of the indicator light of the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 0F 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor replies that the indicator light working mode is night light mode

5.9. Set sensor communication protocol mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0010
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Query mode (Control4 version) 0x0003: Active code sending (Original protocol V3.13.5 version) 0x0004: Modbus-RTU protocol 0x0005: Unified protocol
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor communication protocol to query mode

(Control4 version)

Host->Sensor

55 CA 08 01 06 00 10 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 10 00 02 22 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor communication protocol to ModBus-RTU protocol

Host->Sensor

55 CA 08 01 06 00 10 **00 04** A5 B6

Sensor -> Host

55 AC 08 01 06 00 10 00 04 24 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries ID=01 sensor communication protocol

Host->Sensor

55 CA 08 01 03 00 10 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 05** 13 B6 #Sensor response communication protocol is unified protocol

5.10. Set the active reporting format for sensor status change

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0013
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Fixed interval reporting (report once every 1 second) 0x0002: Timed reporting 0x0003: Disable active reporting (only respond to status when queried)
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor status change fixed interval reporting

Host->Sensor

55 CA 08 01 06 00 13 **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 13 00 01 24 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor status change timed reporting

Host->Sensor

55 CA 08 01 06 00 13 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 13 00 02 25 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the active reporting format for sensor status change with ID=01

Host->Sensor

55 CA 08 01 03 00 13 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 01** 0F B6 #Sensor replies: The active reporting format for status change is set to fixed reporting

5.11. Set the reporting frequency for sensor status changes

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0014
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0001~0x000A: 1~10 times
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF

BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the reporting frequency for sensor status change to 2 times for ID=01

Host->Sensor

55 CA 08 01 06 00 14 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 14 00 02 26 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the reporting frequency for sensor status change to 4 times for ID=01

Host->Sensor

55 CA 08 01 06 00 14 **00 04** A5 B6

Sensor -> Host

55 AC 08 01 06 00 14 00 04 28 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the status change reporting frequency of sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 14 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 04** 12 B6 #Sensor replies: status change reported 4 times

5.12. Set the sensor's periodic reporting time for someone status

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0015
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0001~0x0E10: 1~3600 seconds
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF

BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 to report someone status once every 2 seconds

Host->Sensor

55 CA 08 01 06 00 15 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 15 00 02 22 B6 #Sensor response: successfully set parameters

[Example 2] Host sets the sensor with ID=01 to report someone status once every 10 seconds

Host->Sensor

55 CA 08 01 06 00 15 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 15 00 0A 2F B6 #Sensor response: successfully set parameters

[Example 3] Host queries the sensor with ID=01 for the presence status reporting frequency

Host->Sensor

55 CA 08 01 03 00 15 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 0A** 18 B6 #Sensor replies with reporting frequency **10 seconds** reporting presence status once

5.13. Set the sensor's reporting time for no presence status

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0016
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0001~0x0E10: 1~3600 seconds
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 to report no presence status once every 2 seconds

Host->Sensor

55 CA 08 01 06 00 16 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 16 00 02 23 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the sensor with ID=01 to report no presence status once every 10 seconds

Host->Sensor

55 CA 08 01 06 00 16 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 16 00 0A 30 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sensor with ID=01 for the no presence status reporting frequency

Host->Sensor

55 CA 08 01 03 00 16 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 05** 13 B6 #Sensor replies timing **5 seconds** reporting once for no one status

5.14. Set sensor response additional delay

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0017
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~100ms
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor's response additional delay to 30 milliseconds

Host->Sensor

55 CA 08 01 06 00 17 **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 17 00 1E 45 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor's response additional delay to 100 milliseconds

Host->Sensor

55 CA 08 01 06 00 17 **00 64** A5 B6

Sensor -> Host

55 AC 08 01 06 00 17 00 64 8B B6 #Sensor response: Successfully set parameters

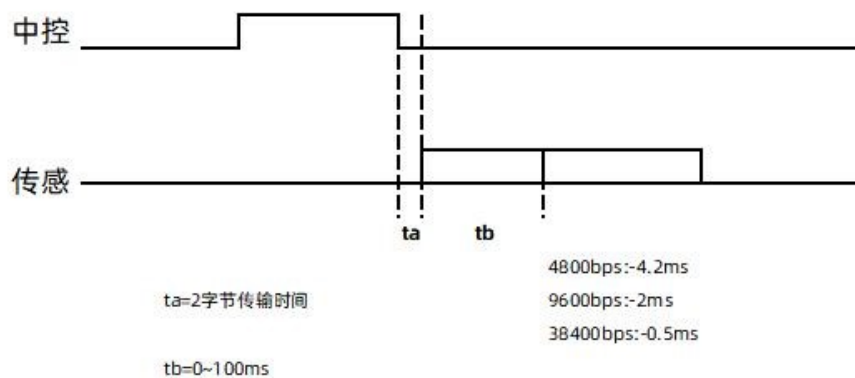
[Example 3] Host queries the response additional delay time of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 17 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 1E** 2C B6 #Sensor replies that the additional delay time is **30 milliseconds**



5.15. Set sensor checksum method

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0018
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: SUM8 *1Byte+0xB6 0x0002: CRC16 *2Byte 0x0003: SUM16*2Byte
BYTE-8	Register Value Low Byte	0x0004: Message sequence *1byte + SUM8 *1Byte 0x0005: Custom fixed end symbol *2Byte
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor checksum method to CRC16 *2Byte

Host->Sensor

55 CA 08 01 06 00 18 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 18 00 02 2A B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor checksum method to SUM16 *2Byte

Host->Sensor

55 CA 08 01 06 00 18 **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 18 00 03 2B B6 #Sensor response: Successfully set parameters

[Example 3] Host sets ID=01 sensor checksum method to custom fixed end symbol
*2Byte

Host->Sensor

55 CA 08 01 06 00 18 **00 05** A5 B6

Sensor -> Host

55 AC 08 01 06 00 18 00 05 2D B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the checksum method of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 18 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 01** 4D B6 #Sensor replies that the checksum method is
CRC16 *2Byte

5.16. Set the message end character method for the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0019
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF: Custom 2Byte
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the message end character for sensor ID=01 to **C1 C2**

Host->Sensor

55 CA 08 01 06 00 19 **C1 C2** A5 B6

Sensor -> Host

55 AC 08 01 06 00 19 C1 C2 AC B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the message end character for sensor ID=01 to **F1 F2**

Host->Sensor

55 CA 08 01 06 00 19 **F1 F2** A5 B6

Sensor -> Host

55 AC 08 01 06 00 19 F1 F2 0C B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the message end method of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 19 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **F1 F2** F1 B6 #Sensor response verification method is **F1 F2**

5.17. Set sensor communication baud rate

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x001A
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: 1200 0x0002: 2400 0x0003: 4800
BYTE-8	Register Value Low Byte	0x0004: 9600 0x0005: 19200 0x0006: 38400 0x0007: 57600 0x0008: 115200
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06

BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor baud rate to 4800

Host->Sensor

55 CA 08 01 06 00 1A **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1A 00 03 2D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor baud rate to 38400

Host->Sensor

55 CA 08 01 06 00 1A **00 06** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1A 00 06 30 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the communication baud rate of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 1A 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 04** 12 B6 #Sensor response communication baud rate is
9600bps

5.18. Set sensor communication check bit

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x001B
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: No check
BYTE-8	Register Value Low Byte	0x0002: Odd check 0x0003: Even check
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF

BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, the communication check bit of the sensor is odd check

Host->Sensor

55 CA 08 01 06 00 1B **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1B 00 02 2D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, the communication check bit of the sensor is even check

Host->Sensor

55 CA 08 01 06 00 1B **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1B 00 03 2E B6 #Sensor response: Successfully set parameters

[Example 3] Host queries ID=01, the communication check bit of the sensor

Host->Sensor

55 CA 08 01 03 00 1B 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor replies that the communication check bit is even check

5.19. Set sensor communication stop bit

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x001C
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: 1 bit
BYTE-8	Register Value Low Byte	0x0002: 2 bits
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, the sensor's communication stop bit is 1 bit

Host->Sensor

55 CA 08 01 06 00 1C **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1C 00 01 2D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, the sensor's communication stop bit is 2 bits

Host->Sensor

55 CA 08 01 06 00 1C **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1C 00 02 2E B6 #Sensor response: Successfully set parameters

[Example 3] Host queries ID=01, the communication check bit of the sensor

Host->Sensor

55 CA 08 01 03 00 1C 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 02** 10 B6 #Sensor replies that the communication stop bit is 2 bits

5.20. Set sensor installation method

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0065
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value
BYTE-8	Register Value Low Byte	0x0001: Ceiling mount 0x0002: Wall mount
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01. The installation method of the sensor is ceiling-mounted.

Host->Sensor

55 CA 08 01 06 00 65 00 01 A5 B6

Sensor -> Host

55 AC 08 01 06 00 65 00 01 76 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01. The installation method of the sensor is wall-mounted.

Host->Sensor

55 CA 08 01 06 00 65 00 02 A5 B6

Sensor -> Host

55 AC 08 01 06 00 65 00 02 77 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries ID=01. The installation method of the sensor is?

Host->Sensor

55 CA 08 01 03 00 65 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 00 01 0F B6 #Sensor replies: The installation method is ceiling-mounted.

5.21. Set sensor detection confirmation time for someone

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0066
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~10 seconds, unit: 100ms
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor's confirmation time for someone to **1 second**

Host->Sensor

55 CA 08 01 06 00 66 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 66 00 0A 80 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor's confirmation time for someone to 2 seconds

Host->Sensor

55 CA 08 01 06 00 66 **00 14** A5 B6

Sensor -> Host

55 AC 08 01 06 00 66 00 14 8A B6 #Sensor response: Successfully set parameters

[Example 3] Host queries ID=01. The installation method of the sensor is?

Host->Sensor

55 CA 08 01 03 00 66 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 00 14 22 B6 #Sensor replies confirmation time for someone to 2 seconds

5.22. Set sensor delay hold time

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0067
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0E10: 0~3600 seconds
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01's sensor no one delay hold time to 10 seconds

Host->Sensor

55 CA 08 01 06 00 67 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 67 00 0A 81 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the no one delay hold time for sensor ID=01 **60 seconds**

Host->Sensor

55 CA 08 01 06 00 67 **00 3C** A5 B6

Sensor -> Host

55 AC 08 01 06 00 67 00 3C B3 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the no one delay hold time for sensor ID=01

Host->Sensor

55 CA 08 01 03 00 67 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 3C** 4A B6 #Sensor replies no one delay hold time **60 seconds**

5.23. Set sensor illumination threshold low value

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0068
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x7D00: 0~32000lux
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the illumination threshold low value for sensor ID=01 **50lux**

Host->Sensor

55 CA 08 01 06 00 68 **00 32** A5 B6

Sensor -> Host

55 AC 08 01 06 00 68 00 AA 81 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the low threshold value of illumination for sensor ID=01 **100lux**

Host->Sensor

55 CA 08 01 06 00 68 **00 64** A5 B6

Sensor -> Host

55 AC 08 01 06 00 68 00 64 DC B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the low threshold value of illumination for sensor ID=01

Host->Sensor

55 CA 08 01 03 00 68 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 64** 72 B6 #Sensor replies with low threshold value of illumination **100lux**

5.24. Set the high threshold value of illumination for the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0069
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x7D00: 0~32000lux
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the high threshold value of illumination for sensor ID=01 **1000lux**

Host->Sensor

55 CA 08 01 06 00 69 **03 E8** A5 B6

Sensor -> Host

55 AC 08 01 06 00 69 03 E8 64 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the high threshold value of illumination for sensor ID=01 **2000lux**

Host->Sensor

55 CA 08 01 06 00 69 **07 D0** A5 B6

Sensor -> Host

55 AC 08 01 06 00 69 07 D0 50 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the illumination threshold high value of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 69 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **07 D0** E5 B6 #Sensor replies with illumination threshold high value **2000lux**

5.25. Set sensor illuminance reporting frequency percentage

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x006A
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~100% Configure illuminance change, report 0~100% of the illuminance, if the difference between the real-time value and the last reported value exceeds the set percentage, it will actively report
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the illuminance reporting frequency of sensor ID=01 to **20%**

Host->Sensor

55 CA 08 01 06 00 6A **00 14** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6A 00 14 8E B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the reporting frequency of the illumination sensor with ID=01 to **50%**

Host->Sensor

55 CA 08 01 06 00 6A **00 32** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6A 00 32 AC B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the reporting frequency percentage of the illuminance sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 6A 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 0A** 18 B6 #Sensor replies that the illuminance reporting frequency is **10%**

5.26. Set whether the sensor detects illumination

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x006B
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value
BYTE-8	Register Value Low Byte	0x0001: Power on 0x0002: Off
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 to enable illumination detection

Host->Sensor

55 CA 08 01 06 00 6B 00 01 A5 B6

Sensor -> Host

55 AC 08 01 06 00 6B 00 01 7C B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor to disable illumination detection

Host->Sensor

55 CA 08 01 06 00 6B 00 02 A5 B6

Sensor -> Host

55 AC 08 01 06 00 6B 00 02 7D B6 #Sensor response: Successfully set parameters

[Example 3] Host queries whether ID=01 sensor has illumination detection enabled

Host->Sensor

55 CA 08 01 03 00 6B 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 00 02 10 B6 #Sensor replies that illumination detection has been disabled

5.27. Set sensor call parameters

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x007F
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Custom parameters 0x0002: Lighting application 0x0003: Security alarm 0x0004: Hotel power supply Applicable to millimeter-wave radar products
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor to call custom parameters

Host->Sensor

55 CA 08 01 06 00 7F **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6F 00 01 80 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 for the sensor to call security alarm parameters

Host->Sensor

55 CA 08 01 06 00 7F **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 7F 00 03 82 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries parameters for sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 7F 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 02** 10 B6 #Sensor replies that illumination detection has been disabled

6. Read/Write 24G Holding Register

6.1. Set sensor working mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x006C
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value
BYTE-8	Register Value Low Byte	0x0001: Detects only movement 0x0002: Detects movement + stationary
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 for the sensor to radar working mode to detect only movement

Host->Sensor

55 CA 08 01 06 00 6C **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6C 00 01 7D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 for the sensor radar working mode to detect moving + stationary

Host->Sensor

55 CA 08 01 06 00 6C **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6C 00 02 7E B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the radar working mode of the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 6C 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 02** 10 B6 #Sensor replies radar working mode to detect moving + stationary

6.2. Set sensor detection distance

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x006D
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0096~0x01C2: 150~450 cm (24G General Version)
BYTE-8	Register Value Low Byte	0x0096~0x03E8: 150~1000 cm (24G Pro Version) Note: Set the detection distance for moving + stationary detection
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the detection distance of the sensor with ID=01 to **3.0 meters**

Host->Sensor

55 CA 08 01 06 00 6D **01 2C** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6D 01 2C AA B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the detection distance of the sensor with ID=01 to **5.7 meters**

Host->Sensor

55 CA 08 01 06 00 6D **02 3A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6D 02 3A B9 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the detection distance of the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 6D 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **01 2C** 3B B6 #Sensor replies that the detection distance is **3.0 meters**

6.3. Set sensor detection distance percentage

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x006E
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~100% (24G Universal Version) Detection Distance= % *450 cm (24G Pro Version) Detection Distance= % *840 cm Note: Set the detection distance percentage for moving + stationary detection
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the detection distance of the sensor with ID=01 to **30%**

Host->Sensor

55 CA 08 01 06 00 6E **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6E 00 1E 9C B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the detection distance of the sensor with ID=01 to **65%**

Host->Sensor

55 CA 08 01 06 00 6E **00 41** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6E 00 41 BF B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the detection distance of the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 6E 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 14** 22 B6 #Sensor replies that the detection distance percentage is **20%**

6.4. Set sensor detection sensitivity

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x006F
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~100%
BYTE-8	Register Value Low Byte	Note: Set sensitivity for detecting movement + stillness
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 motion + still detection sensitivity to **30%**

Host->Sensor

55 CA 08 01 06 00 6F **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6F 00 1E 9D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the sensor with ID=01 motion + still detection sensitivity to **60%**

Host->Sensor

55 CA 08 01 06 00 6F **00 3C** A5 B6

Sensor -> Host

55 AC 08 01 06 00 6E 00 3C BB B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sensor with ID=01 motion + still detection sensitivity

Host->Sensor

55 CA 08 01 03 00 6F 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 3C** 4A B6 #Sensor replies that the detection sensitivity is **60%**

6.5. Set whether the sensor enables life recognition enhancement mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0072
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Enable life recognition enhancement mode 0x0002: Disable life recognition enhancement mode Applicable to 24G Pro version
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 to enable life recognition enhancement mode for the sensor

Host->Sensor

55 CA 08 01 06 00 72 **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 72 00 01 83 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 to disable life recognition enhancement mode for the sensor

Host->Sensor

55 CA 08 01 06 00 72 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 72 00 02 84 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries whether the sensor with ID=01 has enabled life recognition enhancement mode

Host->Sensor

55 CA 08 01 03 00 72 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 01** 0F B6 #Sensor response: Enhanced life recognition mode activated

6.6. Set the sensitivity for motion detection at each distance segment

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06/0x10
BYTE-5	High byte of register address	0x012C
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0000~0x0064
BYTE-8	Register count low byte	
BYTE-9	Number of Bytes to Write	0x00~0xFF
BYTE-10	Motion Segment 0 - High Sensitivity Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-11	Motion Segment 0 - Low Sensitivity Byte	
BYTE-12	Motion Segment 1 - High Sensitivity Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-13	Motion Segment 1 - Low Sensitivity Byte	
BYTE-14	Motion Segment 2 - High Sensitivity Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-15	Motion Segment 2 - Low Sensitivity Byte	
BYTE-16	Motion Segment 3 - High Sensitivity Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-17	Motion Segment 3 - Low Sensitivity Byte	
BYTE-18	Motion Segment 4 -	0x0000~0x0064: 0~100%

	Sensitivity High Byte	Applicable to 24G General Version and 24G Pro Version
BYTE-19	Motion Segment 4 - Sensitivity Low Byte	
BYTE-20	Motion Segment 5 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-21	Motion Segment 5 - Sensitivity Low Byte	
BYTE-22	Motion Segment 6 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-23	Motion Segment 6 - Sensitivity Low Byte	
BYTE-24	Motion Segment 7 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-25	Motion Segment 7 - Sensitivity Low Byte	
BYTE-26	Motion Segment 8 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-27	Motion Segment 8 - Sensitivity Low Byte	
BYTE-28	Motion Segment 9 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-29	Motion Segment 9 - Sensitivity Low Byte	
BYTE-30	Motion Segment 10 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-31	Motion Segment 10 - Sensitivity Low Byte	
BYTE-32	Motion Segment 11 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-33	Motion Segment 11 - Sensitivity Low Byte	
BYTE-34	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-35	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55

BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06/0x10
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Write Register Number High Byte	0x0000~0xFFFF
BYTE-8	Write Register Number Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensitivity of the sensor with ID=01 for each motion segment to **40%**

Host->Sensor

55 CA 21 01 10 01 2C 00 0C 18 **00 28 00 28 00 28 00 28 00 28 00 28 00 28 00 28**
00 28 00 28 00 28 A5 B6

Sensor -> Host

55 AC 08 01 10 01 2C 00 0C 53 B6 #Sensor Response: Successfully set parameters

[Example 2] Host sets the sensitivity of the sensor with ID=01 for motion segments 0~6 to **60%**

Host->Sensor

55 CA 17 01 10 01 2C 00 07 0E **00 28 00 28 00 28 00 28 00 28 00 28 00 28** A5 B6

Sensor -> Host

55 AC 08 01 10 01 2C 00 07 4E B6 #Sensor Response: Successfully set parameters

[Example 3] Host queries the sensitivity of the sensor with ID=01 for each motion segment

Host->Sensor

55 CA 08 01 03 01 2C 00 0C A5 B6

Sensor -> Host

55 AC 1D 01 03 18 **00 28 00 28 00 28 00 28 00 28 00 28 00 28 00 28 00**
28 00 28 1A B6 #Sensor replies that the sensitivity for each motion detection
distance segment is **40%**

[Example 4] Host sets the sensitivity of sensor ID=01 for motion segment 3 to **55%**

Host->Sensor

55 CA 08 01 06 01 2F **00 37** A5 B 6

Sensor -> Host

55 AC 08 01 06 01 2F 00 37 77 B6 #Sensor response: Successfully set parameters

[Example 5] Host queries the sensitivity of sensor ID=01 for motion segment 3

Host->Sensor

55 CA 08 01 03 01 2F 00 01 A5 B 6

Sensor -> Host

55 AC 07 01 03 02 **00 37** 45 B6 #Sensor replies that the sensitivity for motion
segment 3 is **55%**

6.7. Set sensor static detection sensitivity for each distance

segment

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06/0x10
BYTE-5	High byte of register address	0x0140
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0000~0x0064
BYTE-8	Register count low byte	
BYTE-9	Number of Bytes to Write	0x00~0xFF
BYTE-10	Static Segment 0 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-11	Static Segment 0 - Sensitivity Low Byte	
BYTE-12	Static Segment 1 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-13	Static Segment 1 - Sensitivity Low Byte	
BYTE-14	Static Segment 2 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-15	Static Segment 2 - Sensitivity Low Byte	
BYTE-16	Static Segment 3 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version
BYTE-17	Static Segment 3 - Sensitivity Low Byte	
BYTE-18	Static Segment 4 -	0x0000~0x0064: 0~100%

	Sensitivity High Byte	Applicable to 24G General Version and 24G Pro Version
BYTE-19	Static Segment 4 - Sensitivity Low Byte	
BYTE-20	Static Segment 5 - Sensitivity High Byte	0x0000~0x0064: 0~100%
BYTE-21	Stationary Segment 5 - Sensitivity Low Byte	Applicable to 24G General Version and 24G Pro Version
BYTE-22	Stationary Segment 6 - Sensitivity High Byte	0x0000~0x0064: 0~100%
BYTE-23	Stationary Segment 6 - Sensitivity Low Byte	Applicable to 24G General Version and 24G Pro Version

BYTE-24	Stationary Segment 7 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-25	Stationary Segment 7 - Sensitivity Low Byte	
BYTE-26	Stationary Segment 8 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-27	Stationary Segment 8 - Sensitivity Low Byte	
BYTE-28	Stationary Segment 9 - Sensitivity High Byte	0x0000~0x0064: 0~100% Applicable to 24G Pro version
BYTE-29	Stationary Segment 9 - Sensitivity Low Byte	
BYTE-30	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-31	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06/0x10
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Write Register Number High Byte	0x0000~0xFFFF
BYTE-8	Write Register Number Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

Host->Sensor

Sensor -> Host

Host->Sensor

Sensor -> Host

Host->Sensor

Sensor -> Host

Host->Sensor

Sensor -> Host

Host->Sensor

Sensor -> Host

164 page

7. Read and write ToF holding register

7.1. Set the starting and ending distances for detection of sensor segment A

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x00A2
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0000~0x0064
BYTE-8	Register count low byte	
BYTE-9	Number of Bytes to Write	0x00~0xFF
BYTE-10	Segment A starting distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-11	Segment A starting distance low byte	
BYTE-12	Segment A ending distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-13	Segment A ending distance low byte	
BYTE-14	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-15	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55

BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Write Register Number High Byte	0x0000~0xFFFF
BYTE-8	Write Register Number Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

Note: When segment B is not set, it is in single segment detection mode

[Example 1] Host sets the starting distance of sensor segment A with ID=01 to **0 centimeters**, and the ending distance to **100 centimeters**

Host->Sensor

55 CA 0D 01 10 00 A2 00 02 04 **00 00 00 64** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A2 00 02 BE B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the starting detection distance of sensor A with ID=01 to **30 cm**, and the ending distance to **150 cm**

Host->Sensor

55 CA 0D 01 10 00 A2 00 02 04 **00 1E 00 96** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A2 00 02 BE B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the starting and ending detection distances of sensor A with ID=01

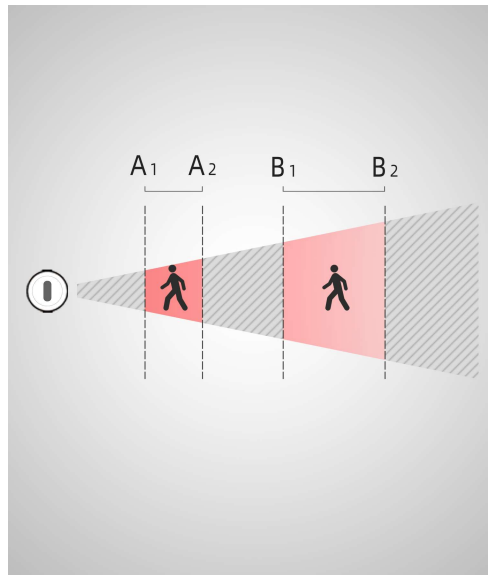
Host->Sensor

55 CA 08 01 03 00 A2 00 02 A5 B6

Sensor -> Host

55 AC 09 01 03 04 **00 1E 00 96** C6 B6 #Sensor replies that the starting and ending detection distances of A are **30 cm** and **150 cm**

Schemat



7.2. Set the starting and ending detection distances of sensor

B

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x00A4
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0000~0x0064
BYTE-8	Register count low byte	
BYTE-9	Number of Bytes to Write	0x00~0xFF
BYTE-10	Segment A starting distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-11	Segment A starting distance low byte	
BYTE-12	Segment A ending distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-13	Segment A ending distance low byte	
BYTE-14	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-15	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host

BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10 write multiple holding register addresses consecutively
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Write Register Number High Byte	0x0000~0xFFFF
BYTE-8	Write Register Number Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] The host sets the starting detection distance of sensor segment B with ID=01 to **100 centimeters**, and the ending distance to **200 centimeters**

Host->Sensor

55 CA 0D 01 10 00 A2 00 02 04 **00 64 00 C8** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A2 00 02 BE B6 #Sensor response: Successfully set parameters

[Example 2] The host sets the starting detection distance of sensor segment B with ID=01 to **150 centimeters**, and the ending distance to **240 centimeters**

Host->Sensor

55 CA 0D 01 10 00 A2 00 02 04 **00 96 00 F0** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A2 00 02 BE B6 #Sensor response: Successfully set parameters

[Example 3] The host queries the starting and ending detection distances of sensor segment B with ID=01

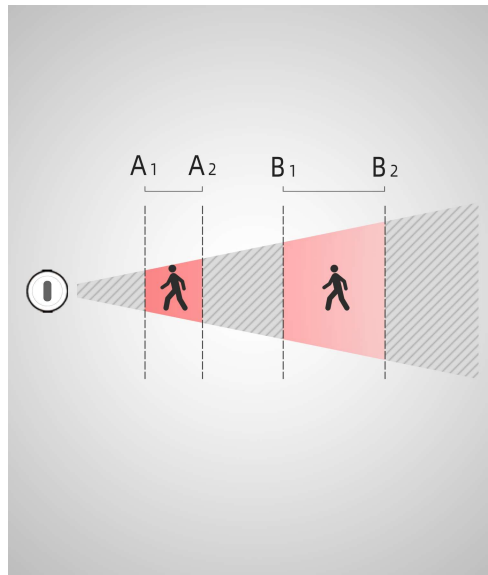
Host->Sensor

55 CA 08 01 03 00 A4 00 02 A5 B6

Sensor -> Host

55 AC 09 01 03 04 **00 64 00 C8** C6 B6 #The sensor replies that the starting and ending detection distances of segment B are **100 centimeters** and **200 centimeters**

Schemat



7.3. Set the near-end distance for triggering the sensor when approaching

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x00A6
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0140: 0~320 centimeters
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF

BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the near-end triggering distance of the sensor with ID=01 to **30 centimeters**

Host->Sensor

55 CA 08 01 06 00 A6 **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 A6 00 1E D4 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the near-end triggering distance of the sensor with ID=01 to **50 centimeters**

Host->Sensor

55 CA 08 01 06 00 A6 **00 32** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A6 00 32 F2 B6 #Sensor response: Successfully set parameters

[Example 3] Host sets the near-end triggering distance of the sensor with ID=01 to **50 centimeters**, and the far-end triggering distance to **150 centimeters**

Host->Sensor

55 CA 0D 01 10 00 A6 00 02 04 **00 32 00 96** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A6 **00 02** C2 B6 #Sensor response: Successfully set parameters

[Example 4] The host queries the sensor with ID=01 for the near trigger distance

Host->Sensor

55 CA 08 01 03 00 A6 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 32** C6 B6 #Sensor replies with the near trigger distance **50 centimeters**

[Example 5] The host queries the sensor with ID=01 for the near trigger distance and the far trigger distance

Host->Sensor

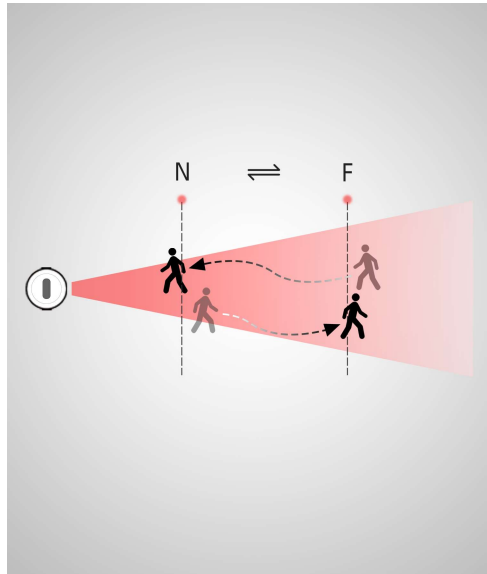
55 CA 08 01 03 00 A6 00 02 A5 B6

Sensor -> Host

55 AC 09 01 03 04 **00 32 00 96** DA B6 #Sensor replies with the near trigger distance

50 centimeters, far trigger distance **150 centimeters**

Schemat
:-



7.4. Set the sensor's far trigger distance

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x00A7
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0140: 0~320 centimeters
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 to trigger the far-end distance as **150 centimeters**

Host->Sensor

55 CA 08 01 06 00 A7 **00 96** A5 B6

Sensor -> Host

55 AC 08 01 06 00 A7 00 96 4D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the sensor with ID=01 to trigger the far-end distance as **200 centimeters**

Host->Sensor

55 CA 08 01 06 00 A7 **00 C8** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A7 00 C8 7F B6 #Sensor response: Successfully set parameters

[Example 3] Host sets the near-end triggering distance of the sensor with ID=01 to **50 centimeters**, and the far-end triggering distance to **150 centimeters**

Host->Sensor

55 CA 0D 01 10 00 A6 00 02 04 **00 32 00 96** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A6 **00 02** C2 B6 #Sensor response: Successfully set parameters

[Example 4] Host queries the far-end distance of the sensor with ID=01 for triggering **Host->Sensor**

55 CA 08 01 03 00 A7 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 96** A4 B6 #Sensor replies with the far-end distance for triggering **150 centimeters**

[Example 5] The host queries the sensor with ID=01 for the near trigger distance and the far trigger distance

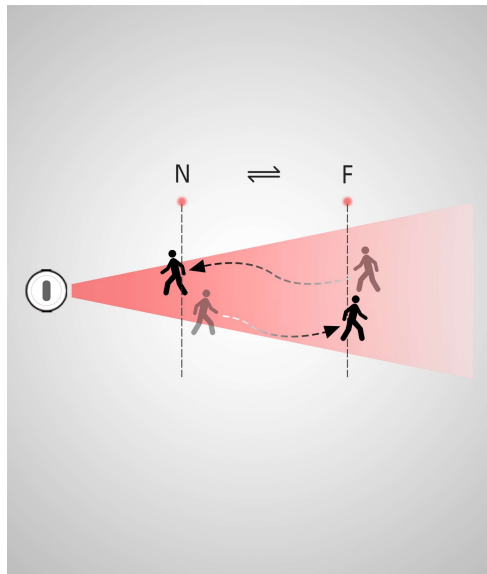
Host->Sensor

55 CA 08 01 03 00 A6 00 02 A5 B6

Sensor -> Host

55 AC 09 01 03 04 **00 32 00 96** DA B6 #Sensor replies with the near trigger distance **50 centimeters**, far trigger distance **150 centimeters**

Schemat



7.5. Set the limit time for the sensor to trigger when approaching and moving away

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x00A8
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x003C: 0~60s
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF



BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] The host sets the limit time for the sensor with ID=01 to trigger when approaching and moving away to **5 seconds**

Host->Sensor

55 CA 08 01 06 00 A8 **00 05** A5 B6

Sensor -> Host

55 AC 08 01 06 00 A8 00 05 BD B6 #Sensor response: Successfully set parameters

[Example 2] The host sets the limit time for the sensor with ID=01 to trigger when approaching and moving away to **10 seconds**

Host->Sensor

55 CA 08 01 06 00 A8 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A8 00 0A C2 B6 #Sensor response: Successfully set parameters

[Example 3] The host queries the limit time for the sensor with ID=01 to trigger when approaching and moving away

Host->Sensor

55 CA 08 01 03 00 A8 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 0A** 18 B6 #Sensor replies that the limit moving time is **10 seconds**

7.6. Set sensor multi-segment trigger distance length

Host->Sensor

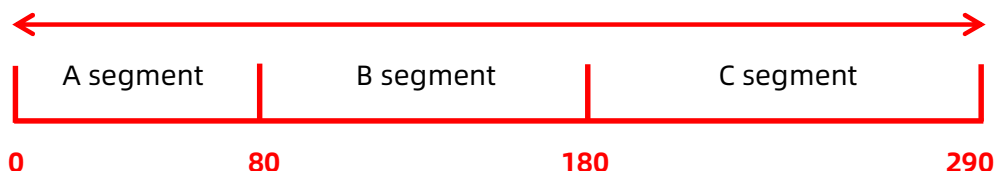
Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x00A9
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0000~0x0064
BYTE-8	Register count high byte	
BYTE-9	Number of Bytes to Write	0x00~0xFF
BYTE-10	A segment trigger distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-11	A segment trigger distance low byte	
BYTE-12	B segment trigger distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-13	B segment trigger distance low byte	
BYTE-14	C segment trigger distance high byte	0x0000~0x0140: 0~320 centimeters
BYTE-15	C segment trigger distance low byte	
BYTE-16	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-17	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
---------------	----------	----------------------

BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Write Register Number High Byte	0x0000~0xFFFF
BYTE-8	Write Register Number Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6



[Example 1] Host sets the trigger distance for sensor A segment with ID=01 to **80 centimeters**, B segment trigger distance to **100 centimeters**, and C segment trigger distance to **110 centimeters**

Host->Sensor

55 CA 0F 01 10 00 A9 00 03 06 **00 50 00 64 00 6E** A5 B6

Sensor -> Host

55 AC 08 01 10 00 A9 00 03 C6 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the trigger distance for sensor B with ID=01 to **150 centimeters**

Host->Sensor

55 CA 08 01 06 00 AA **00 96** A5 B6

Sensor -> Host

55 AC 08 01 06 00 AA 00 96 50 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the trigger distances for sensors A, B, and C with ID=01

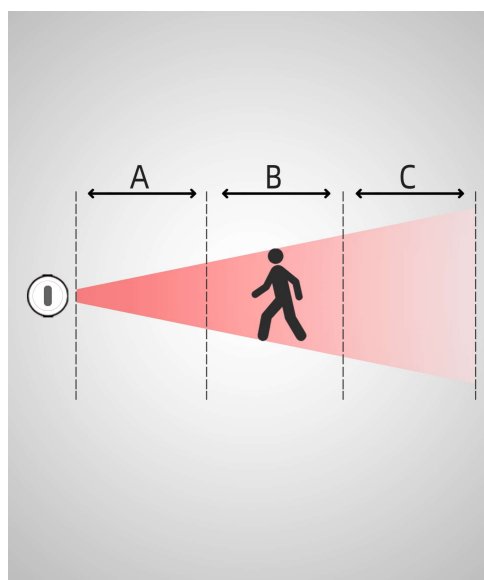
Host->Sensor

55 CA 08 01 03 00 A9 00 03 A5 B6

Sensor -> Host

55 AC 0B 01 03 06 **00 50 00 64 00 6E** 38 B6 #Sensor replies A segment trigger distance **80 centimeters**, B segment trigger distance **100 centimeters**, C segment trigger distance **110 centimeters**

Schemat
:-



7.7. Set multi-segment detection trigger time for the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x00AC
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0000~0x0064
BYTE-8	Register count high byte	
BYTE-9	Number of Bytes to Write	0x00~0xFF
BYTE-10	A Segment trigger stay time high byte	0x0000~0x0258: 0~600s If the set time is exceeded, it will trigger a hold
BYTE-11	A Segment trigger stay time low byte	
BYTE-12	B Segment trigger stay time high byte	0x0000~0x0258: 0~600s If the set time is exceeded, it will trigger a hold
BYTE-13	B Segment trigger stay time low byte	
BYTE-14	C Segment trigger stay time high byte	0x0000~0x0258: 0~600s If the set time is exceeded, it will trigger a hold
BYTE-15	C Segment trigger stay time low byte	
BYTE-16	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-17	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
---------------	----------	----------------------

BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x10
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Write Register Number High Byte	0x0000~0xFFFF
BYTE-8	Write Register Number Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] The host sets the stay time of segment A trigger for sensor ID=01 to 5 seconds, segment B trigger stay time to 6 seconds, and segment C trigger stay time to 8 seconds

Host->Sensor

55 CA 0F 01 10 00 AC 00 03 06 **00 05 00 06 00 08** A5 B6

Sensor -> Host

55 AC 08 01 10 00 AC 00 03 C9 B6 #Sensor response: Successfully set parameters

[Example 2] The host sets the stay time of segment A trigger for sensor ID=01 to 10 seconds

Host->Sensor

55 CA 08 01 06 00 AC **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 AC 00 0A C6 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the trigger retention time of sensors A, B, C with ID=01

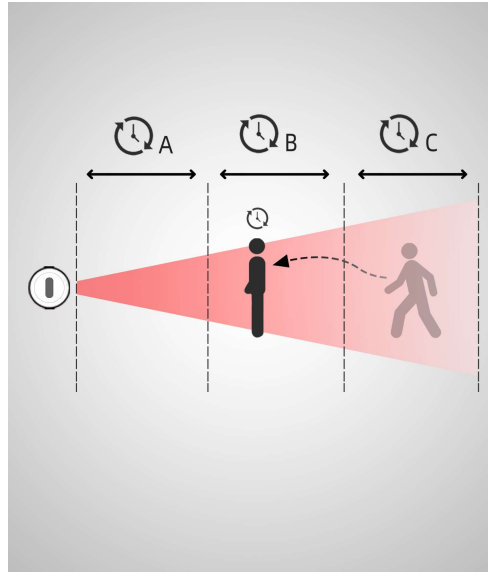
Host->Sensor

55 CA 08 01 03 00 AC 00 03 A5 B6

Sensor -> Host

55 AC 0B 01 03 06 **00 05 00 06 00 0A 2B** B6 #Sensor replies A segment trigger retention time **5 seconds**, B segment trigger retention time **6 seconds**, C segment trigger retention time **10 seconds**

Schemat



7.8. Set sensor detection distance mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x00AF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Short distance (maximum measurement distance 1.3 meters) 0x0002: Medium distance (maximum measurement distance 2.9 meters) 0x0003: Long distance (maximum measurement distance 3.2 meters)
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the detection distance mode of sensor with ID=01 to **short distance** measurement

Host->Sensor

55 CA 08 01 06 00 AF **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 AF 00 01 C0 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the detection distance mode of sensor ID=01 to **Medium Distance** Measurement

Host->Sensor

55 CA 08 01 06 00 AF **00 02** A5 B6

Sensor -> Host

55 AC 08 01 10 00 AF 00 02 C1 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the detection distance mode of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 AF 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 02** 10 B6 #Sensor replies that the detection distance mode is Medium Distance

8. Read Write 60G Holding Register

8.1. Set sensor dry contact output control mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x001D
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value
BYTE-8	Register Value Low Byte	0x0001: Automatic mode
		0x0002: Manual mode
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the dry contact output of sensor ID=01 to **manual mode**

Host->Sensor

55 CA 08 01 06 00 1D **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1D 00 02 2F B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the dry contact output of sensor ID=01 to **automatic mode**

Host->Sensor

55 CA 08 01 06 00 1D **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1D 00 01 2E B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the dry contact output mode of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 1D 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 02** 10 B6 #Sensor replies that the dry contact output mode is **manual mode**

8.2. Set the forced output time of the sensor's dry contact

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x001E
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001~0x05A0: 0~1440 minutes During timing: output is in the ON state Timing ends: automatic mode outputs based on sensing status Manual mode output OFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the forced output time of the dry contact of sensor ID=01 to **1 minute**

Host->Sensor

55 CA 08 01 06 00 1E **00 01** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1E 00 01 2F B6 #Sensor response: successfully set parameters

[Example 2] Host sets the output time of the dry contact of sensor ID=01 to **3 minutes**

Host->Sensor

55 CA 08 01 06 00 1E **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1E 00 03 31 B6 #Sensor response: successfully set parameters

[Example 3] Host queries the forced output time of the dry contact of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 1E 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor replies that the forced output time of the dry contact is **3 minutes**

8.3. Set sensor dry contact output status

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x001F
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Present 0x0002: Fall 0x0003: Get out of bed (left/right)
BYTE-8	Register Value Low Byte	0x0004: Return to bed (left/right) 0x0005: Leave home 0x0006: Return home
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF

BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor dry contact output status to **Fall with ID=01**

Host->Sensor

55 CA 08 01 06 00 1F **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1F 00 02 31 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the sensor dry contact output status to **Return to bed with ID=01**

Host->Sensor

55 CA 08 01 06 00 1F **00 04** A5 B6

Sensor -> Host

55 AC 08 01 06 00 1F 00 04 33 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sensor dry contact output status with ID=01

Host->Sensor

55 CA 08 01 03 00 1F 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 04** 12 B6 #Sensor replies that the dry contact output status is **returning to bed**

8.4. Set sensor dry contact output mode

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0020
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Normally open mode 0x0002: Normally closed mode 0x0003: Normally open pulse 0x0004: Normally closed pulse 0x0005: SQW
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the dry contact output mode of sensor with ID=01 to **normally closed mode**

Host->Sensor

55 CA 08 01 06 00 20 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 20 00 02 32 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the dry contact output mode of sensor with ID=01 to **normally open pulse**

Host->Sensor

55 CA 08 01 06 00 20 **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 20 00 03 33 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the dry contact output mode of sensor ID=01

Host->Sensor

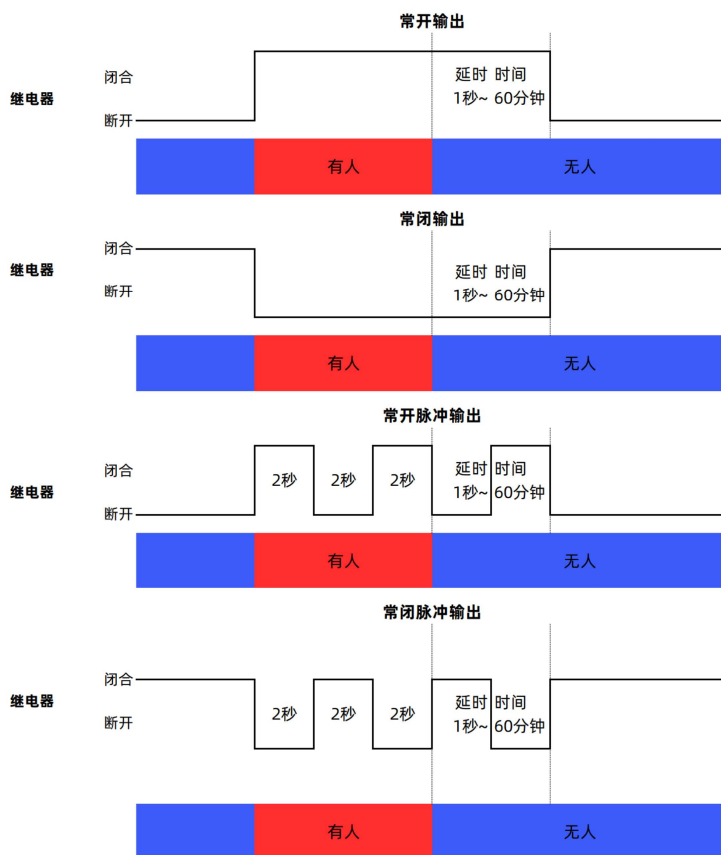
55 CA 08 01 03 00 20 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 02** 10 B6 #Sensor replies that the dry contact output mode is **normally closed mode**

Schemat

:-



8.5. Set the manual control switch for the sensor's dry contact output

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0021
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000: Invalid Value 0x0001: Power on 0x0002: Off Effective only in manual control mode
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the sensor with ID=01 **to turn off** the dry contact output

Host->Sensor

55 CA 08 01 06 00 21 **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 21 00 01 33 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the sensor with ID=01 **to turn on** the dry contact output

Host->Sensor

55 CA 08 01 06 00 21 00 02 A5 B6

Sensor -> Host

55 AC 08 01 06 00 21 00 02 33 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries whether the dry contact output is allowed for the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 21 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 01** 09 B6 #Sensor replies dry contact **Allow output**

8.6. Set sensor installation height

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0091
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0014~0x0020: 20~32 decimeters Height of the installation position from the ground
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, sensor installation height is **2.7 meters**

Host->Sensor

55 CA 08 01 06 00 91 **00 1B** A5 B6

Sensor -> Host

55 AC 08 01 06 00 91 00 1B BC B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, sensor installation height is **3.0 meters**

Host->Sensor

55 CA 08 01 06 00 91 **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 91 00 1E BF B6 #Sensor response: Successfully set parameters

[Example 3] Host queries whether the dry contact output is allowed for the sensor with ID=01

Host->Sensor

55 CA 08 01 03 00 91 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 1B** 29 B6 #Sensor replies installation height is **2.7 meters**

8.7. Set the sensor detection range X-axis length

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0092
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x000A~0x0032: 10~50 decimeters
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, the sensor's detection range X-axis length is **2.0 meters**

Host->Sensor

55 CA 08 01 06 00 92 **00 14** A5 B6

Sensor -> Host

55 AC 08 01 06 00 92 00 14 B6 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, the sensor's detection range X-axis length is **3.0 meters**

Host->Sensor

55 CA 08 01 06 00 92 **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 92 00 1E C0 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the detection range of sensor ID=01 on the X-axis

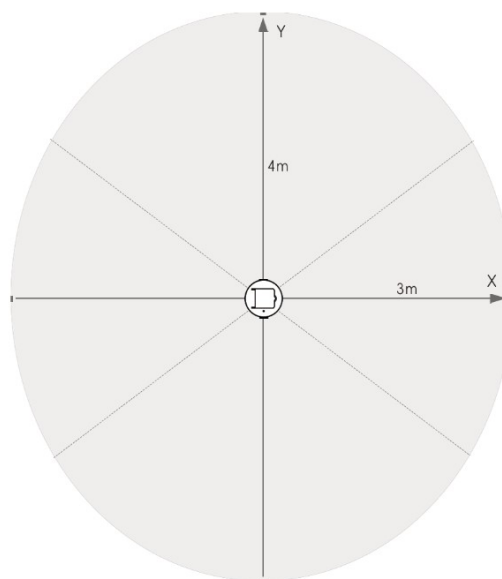
Host->Sensor

55 CA 08 01 03 00 92 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 1E** 2C B6 #Sensor replies that the X-axis detection range is **3.0 meters**

Schemat



8.8. Set the sensor detection range Y-axis length

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0093
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x000A~0x0032: 10~50 decimeters
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, the sensor's detection range Y-axis length is **2.0 meters**

Host->Sensor

55 CA 08 01 06 00 93 **00 14** A5 B6

Sensor -> Host

55 AC 08 01 06 00 93 00 14 B7 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, the sensor's detection range Y-axis length is **3.0 meters**

Host->Sensor

55 CA 08 01 06 00 93 **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 93 00 1E C1 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sensor Y-axis detection range with ID=01

Host->Sensor

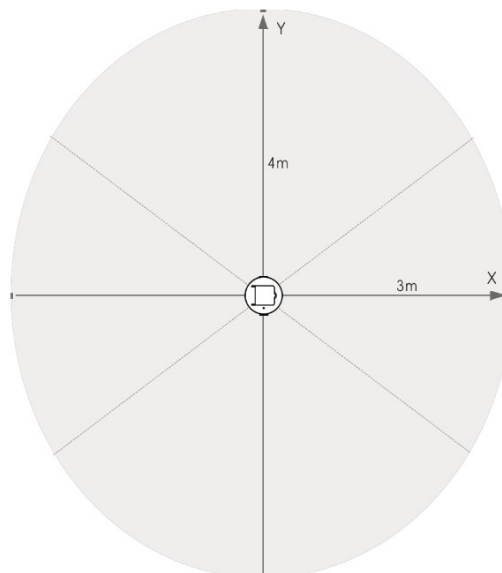
55 CA 08 01 03 00 93 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 1E** 2C B6 #Sensor replies that the Y-axis detection range is **3.0 meters**

Schemat

:-



8.9. Set the sensor detection motion sensitivity

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0083
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~100%
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, the sensor's detection motion sensitivity is **60%**

Host->Sensor

55 CA 08 01 06 00 83 **00 3C** A5 B6

Sensor -> Host

55 AC 08 01 06 00 83 00 3C CF B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, the sensor's detection motion sensitivity is **30%**

Host->Sensor

55 CA 08 01 06 00 83 **00 1E** A5 B6

Sensor -> Host

55 AC 08 01 06 00 83 00 1E B1 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sensor's detection motion sensitivity for ID=01

Host->Sensor

55 CA 08 01 03 00 83 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 1E** 2C B6 #Sensor replies that the detection motion sensitivity is **30%**

8.10. Set sensor detection stationary sensitivity

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0084
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0064: 0~100%
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor's stationary sensitivity to **60%**

Host->Sensor

55 CA 08 01 06 00 84 **00 3C** A5 B6

Sensor -> Host

55 AC 08 01 06 00 84 00 3C D0 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor's detection stationary sensitivity to **70%**

Host->Sensor

55 CA 08 01 06 00 84 **00 46** A5 B6

Sensor -> Host

55 AC 08 01 06 00 84 00 46 DA B6 #Sensor response: Successfully set parameters

[Example 3] Host queries ID=01 sensor's detection stationary sensitivity

Host->Sensor

55 CA 08 01 03 00 84 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 46 54** B6 #Sensor replies that the detection stationary sensitivity is **70%**

8.11. Set sensor detection fall alarm timing

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0086
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x003C: 0~60s Report fall message if the fall exceeds the set time
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor's detection fall alarm timing to **6 seconds**

Host->Sensor

55 CA 08 01 06 00 86 **00 06** A5 B6

Sensor -> Host

55 AC 08 01 06 00 86 00 06 9C B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor's detection fall alarm timing to **10 seconds**

Host->Sensor

55 CA 08 01 06 00 86 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 86 00 0A A0 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the detection fall alarm timing of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 86 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 0A** 18 B6 #Sensor replies with detection fall alarm timing

For **10 seconds**

8.12. Set the sensor to detect the height of a person lying on the ground after a fall

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0087
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0008: 0~8 decimeters
BYTE-8	Register Value Low Byte	H indicates the height of a person lying on the ground after a fall
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	

BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, sensor detects the height of a person lying on the ground after a fall as **0.3 meters**

Host->Sensor

55 CA 08 01 06 00 87 **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 87 00 03 9A B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, sensor detects the height of a person lying on the ground after a fall as **0.6 meters**

Host->Sensor

55 CA 08 01 06 00 87 **00 06** A5 B6

Sensor -> Host

55 AC 08 01 06 00 87 00 03 9A B6 #Sensor response: Successfully set parameters

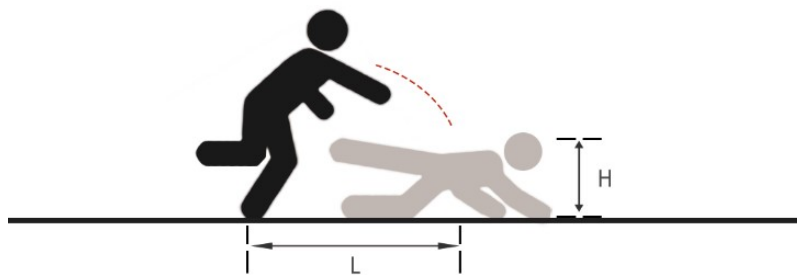
[Example 3] Host queries the height of a person lying on the ground after a fall for sensor ID=01

Host->Sensor

55 CA 08 01 03 00 87 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor restores the height lying on the ground to
0.3 meters

Schemat
:-

8.13. Set the sensor to detect the sliding distance after a person falls

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0088
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0008: 0~8 decimeters
BYTE-8	Register Value Low Byte	L represents the distance slid after falling
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF

BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, sensor detects the sliding distance after a person falls to **0.5 meters**

Host->Sensor

55 CA 08 01 06 00 88 **00 05** A5 B6

Sensor -> Host

55 AC 08 01 06 00 88 00 05 9D B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, sensor detects the sliding distance after a person falls to **0.3 meters**

Host->Sensor

55 CA 08 01 06 00 88 **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 88 00 08 9B B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sliding distance after sensor ID=01 detects a person falling

Host->Sensor

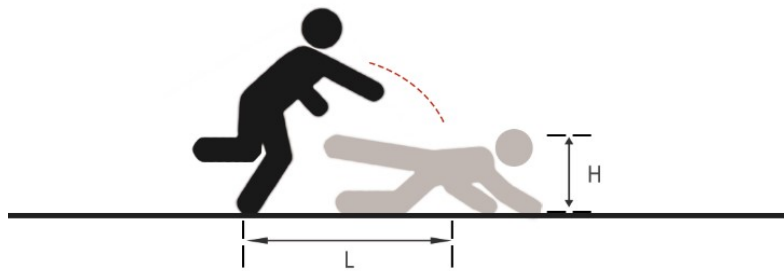
55 CA 08 01 03 00 88 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor replies that the sliding distance after falling is **0.3 meters**

Schemat

:-



8.14. Set the width of the bed detected by the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0089
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x0018: 0~24 decimeters W represents the width of the bed
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the width of the bed detected by sensor ID=01 to **2.0 meters**

Host->Sensor

55 CA 08 01 06 00 89 **00 14** A5 B6

Sensor -> Host

55 AC 08 01 06 00 89 00 14 AD B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the width of the bed detected by sensor ID=01 to **2.2 meters**

Host->Sensor

55 CA 08 01 06 00 89 **00 16** A5 B6

Sensor -> Host

55 AC 08 01 06 00 89 00 16 AF B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the width of the detection bed for sensor ID=01

Host->Sensor

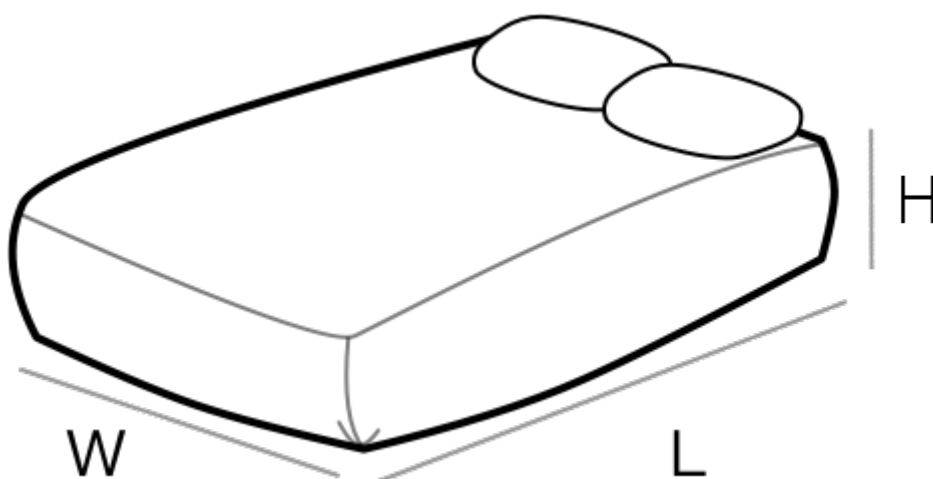
55 CA 08 01 03 00 89 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 16** 24 B6 #Sensor replies that the width of the detection bed is **2.2 meters**

Schemat

:-



8.15. Set the length of the detection bed for the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x008A
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x001A: 0~26 decimeters L represents the length of the bed
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the length of the detection bed for sensor ID=01 to **1.8 meters**

Host->Sensor

55 CA 08 01 06 00 8A **00 12** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8A 00 12 AC B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the length of the detection bed for sensor ID=01 to **2.0 meters**

Host->Sensor

55 CA 08 01 06 00 8A **00 14** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8A 00 14 AE B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the length of the detection bed for sensor ID=01

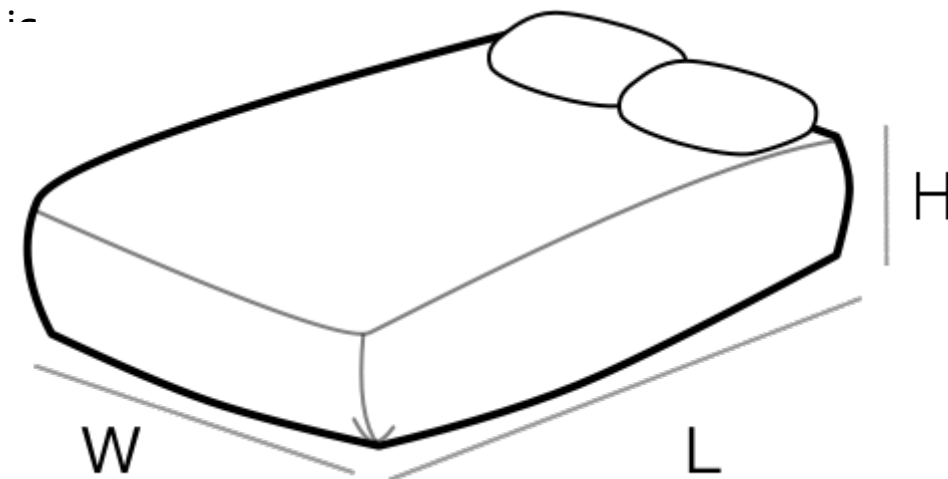
Host->Sensor

55 CA 08 01 03 00 8A 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 14** 22 B6 #Sensor replies that the length of the detection bed is **2.0 meters**

Schemat



8.16. Set the height of the sensor detection bed

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x008B
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0004~0x0007: 4 ~7 decimeters H represents the height of the bed
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	

BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the height of the sensor detection bed for ID=01 to **0.4 meters**

Host->Sensor

55 CA 08 01 06 00 8B **00 04** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8B 00 04 9F B6 #Sensor response: Successfully set parameters

[Example 2] Host sets the height of the sensor detection bed for ID=01 to **0.6 meters**

Host->Sensor

55 CA 08 01 06 00 8B **00 06** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8B 00 06 A1 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the height of the bed detected by sensor ID=01

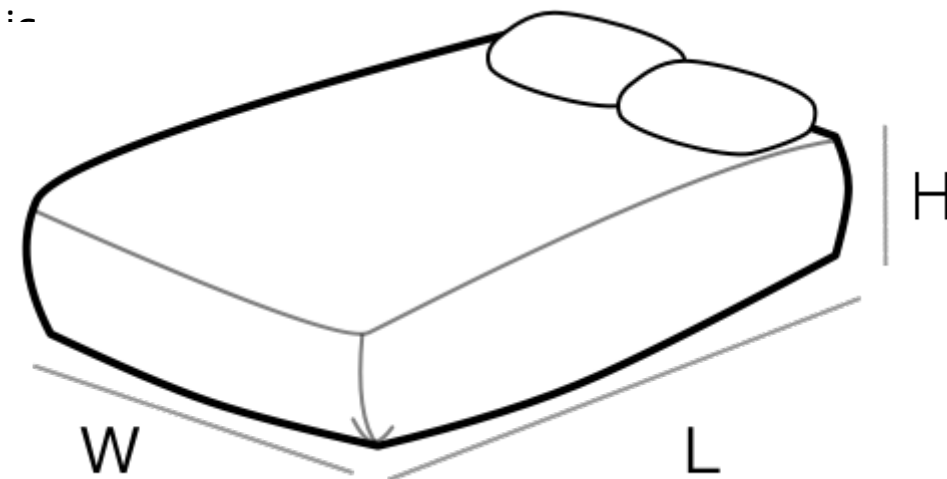
Host->Sensor

55 CA 08 01 03 00 8B 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 06** 14 B6 #Sensor replies that the height of the bed detected is **0.6 meters**

Schemat



8.17. Set the distance for the sensor to trigger when leaving the bed

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x008C
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0001~0x000A: 1 ~10 decimeters
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF

BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the distance for sensor ID=01 to trigger when leaving the bed to **0.2 meters**

Host->Sensor

55 CA 08 01 06 00 8C **00 02** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8C 00 02 9E B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, the distance for the sensor to trigger leaving the bed is **0.3 meters**

Host->Sensor

55 CA 08 01 06 00 8C **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8C 00 03 9F B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the distance for the sensor with ID=01 to trigger leaving the bed

Host->Sensor

55 CA 08 01 03 00 8C 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor replies that the distance to trigger leaving the bed is **0.3 meters**

8.18. Set the sensor installation deviation from the center of the bed along the X-axis

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x008E
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0xFFF6~0x000A: -10~10 decimeters Negative number representation: The original code is inverted in decimal and then +1 to obtain the negative value -5 decimeters=0xFFFB -7 decimeters=0xFFF9 -10 decimeters=0xFFF6
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06

BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, sensor installation deviation from the center of the bed along the X-axis is **0.3 meters**

Host->Sensor

55 CA 08 01 06 00 8E **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8E 00 03 A1 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, sensor installation deviation from the center of the bed along the X-axis is **-0.2 meters**

Host->Sensor

55 CA 08 01 06 00 8E FF FE A5 B6

Sensor -> Host

55 AC 08 01 06 00 8E **FF FE** 9B B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the distance of the sensor installation deviation from the center of the bed along the X-axis for ID=01

Host->Sensor

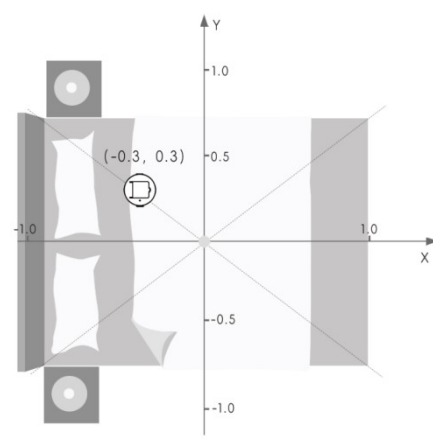
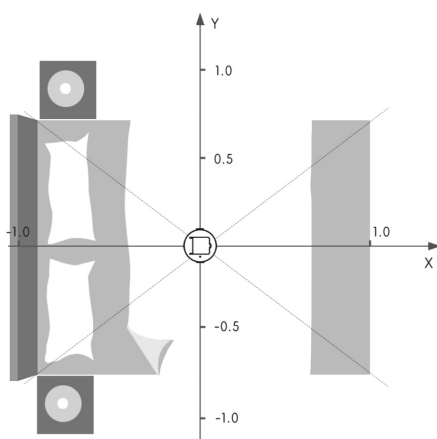
55 CA 08 01 03 00 8E 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **FF FE** 0B B6 #Sensor replies that the installation deviation from the center of the bed along the X-axis is **-0.2 meters**

[\[Negative Number Calculator\]](#)

Schemat



8.19. Set the sensor installation deviation from the center of the bed along the Y-axis distance

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x008F
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0xFFF6~0x000A: -10~10 decimeters Negative number representation: The original code is inverted in decimal and then +1 to obtain the negative value -5 decimeters=0xFFFB -7 decimeters=0xFFF9 -10 decimeters=0xFFF6
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail

BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, sensor installation deviation from the center of the bed along the Y-axis is **0.3 meters**

Host->Sensor

55 CA 08 01 06 00 8F **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 8F 00 03 A2 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, sensor installation deviation from the center of the bed along the Y-axis is **-0.2 meters**

Host->Sensor

55 CA 08 01 06 00 8F FF FE A5 B6

Sensor -> Host

55 AC 08 01 06 00 8F **FF FE** 9C B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the distance of the sensor installation deviation from the center of the bed along the Y-axis for ID=01

Host->Sensor

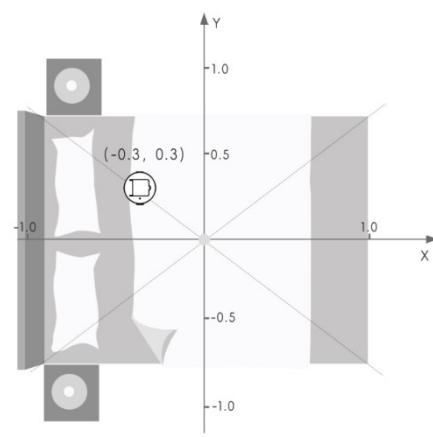
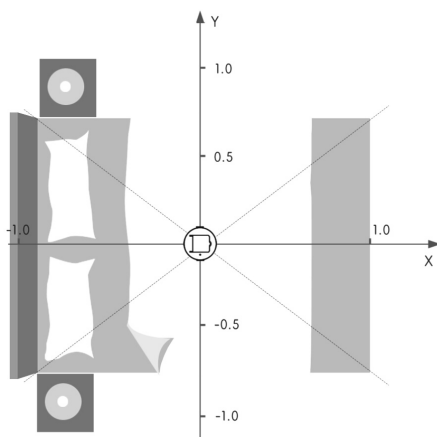
55 CA 08 01 03 00 8F 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor replies that the installation deviation from the center of the bed along the Y-axis is **-0.2 meters**

[\[Negative Number Calculator\]](#)

Schemat



8.20. Set the sensor detection bed height trigger count

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0090
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0001~0x0008: 1~8 times The number of consecutive triggers within a unit time
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High	0x0000~0xFFFF

	Byte	
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01 sensor detection bed height trigger count to **3 times**

Host->Sensor

55 CA 08 01 06 00 90 **00 03** A5 B6

Sensor -> Host

55 AC 08 01 06 00 90 00 03 A3 B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01 sensor detection bed height trigger count to **4 times**

Host->Sensor

55 CA 08 01 06 00 90 **00 04** A5 B6

Sensor -> Host

55 AC 08 01 06 00 90 00 04 A4 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the sensor detection bed height trigger count for ID=01

Host->Sensor

55 CA 08 01 03 00 90 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 03** 11 B6 #Sensor response: Detection of bed height trigger count is **3 times**

8.21. Set the distance of the sensor installation to the exit position

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0085
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0002~0x000F: 2~15 decimeters Straight-line distance
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register	

	address	
BYTE-7	Register Value High Byte	0x0000~0xFFFF
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets ID=01, sensor installation straight-line distance to exit position is **0.5 meters**

Host->Sensor

55 CA 08 01 06 00 85 **00 05** A5 B6

Sensor -> Host

55 AC 08 01 06 00 85 00 05 9A B6 #Sensor response: Successfully set parameters

[Example 2] Host sets ID=01, sensor installation straight-line distance to exit position is **1.0 meters**

Host->Sensor

55 CA 08 01 06 00 85 **00 0A** A5 B6

Sensor -> Host

55 AC 08 01 06 00 85 00 0A 9F B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the straight-line distance from the sensor with ID=01 installed at the exit position

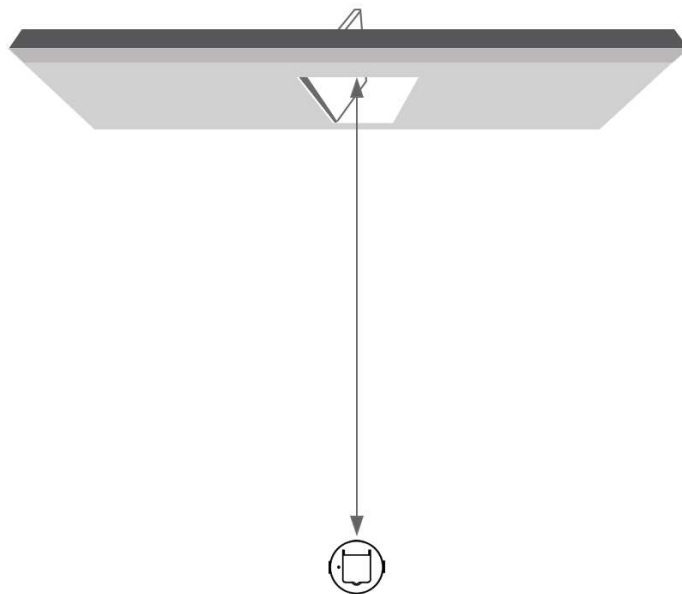
Host->Sensor

55 CA 08 01 03 00 85 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 0A** 18 B6 #Sensor replies: the straight-line distance to the exit position is **1.0 meters**

Schemat
:-



8.22. Set the width of the sensor's detection at the exit

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0094
BYTE-6	Low byte of register address	
BYTE-7	Register Value High Byte	0x0000~0x003C: 0~60 decimeters Circular diameter
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x08: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x06
BYTE-5	High byte of register address	0x0001~0xFFFF
BYTE-6	Low byte of register address	
BYTE-7	Register Value High	0x0000~0xFFFF

	Byte	
BYTE-8	Register Value Low Byte	
BYTE-9	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-8
BYTE-10	Frame tail identifier	0xB6

[Example 1] Host sets the width of the sensor's detection at the exit to **1.2 meters**

Host->Sensor

55 CA 08 01 06 00 94 **00 0C** A5 B6

Sensor -> Host

55 AC 08 01 06 00 94 00 0C B0 B6 #Sensor response: successfully set parameters

[Example 2] Host sets the width of the sensor's detection at the exit to **1.5 meters**

Host->Sensor

55 CA 08 01 06 00 94 **00 0F** A5 B6

Sensor -> Host

55 AC 08 01 06 00 94 00 0F B3 B6 #Sensor response: Successfully set parameters

[Example 3] Host queries the width of the detection output of sensor ID=01

Host->Sensor

55 CA 08 01 03 00 94 00 01 A5 B6

Sensor -> Host

55 AC 07 01 03 02 **00 0F** 1D B6 #Sensor replies that the width of the detection output is **1.5 meters**

9. Read-only General Input Register

9.1. Read whether the sensor detection meets the scene

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0001
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000: Meets the turn off light scene
BYTE-7	Data low byte	0x0001: Meets the turn on light scene
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7

BYTE-9	Frame tail identifier	0xB6
--------	-----------------------	------

[Example 1] Read whether sensor ID=01 detection meets the scene

Host->Sensor

55 CA 08 01 04 00 02 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **00 01** 10 B6 #Sensor replies that it meets **turn on light scene**

Sensor -> Host

55 AC 07 01 04 02 **00 00** 0F B6 #Sensor response meets **Turn off light scene**

9.2. Read sensor to detect if someone is present

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0002
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000: No One 0x0001: Someone
BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read whether sensor ID=01 detection meets the scene

Host->Sensor

55 CA 08 01 04 00 02 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **00 01** 10 B6 #Sensor response **Detected someone**

Sensor -> Host

55 AC 07 01 04 02 **00 00** 0F B6 #Sensor response **Detected no one**

9.3. Read sensor to detect real-time illuminance

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0004
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000~0x7D00: 0~32000lux
BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read real-time illuminance detected by sensor ID=01

Host->Sensor

55 CA 08 01 04 00 04 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 00 96 A5 B6 #Sensor response current real-time illuminance

150lux

Sensor -> Host

55 AC 07 01 04 02 00 32 41 B6 #Sensor replies with current real-time
illuminance **50lux**

9.4. Read the model of the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0065
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0101: Infrared motion sensor 0x0201: ToF distance sensor 0x0501: High-altitude motion sensor
BYTE-7	Data low byte	0x1801: 24G millimeter-wave presence sensor 0x1901: 24G millimeter-wave performance version presence sensor

		0x3C01: 60G health detection sensor
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read the model of sensor ID=01

Host->Sensor

55 CA 08 01 04 00 65 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **01 01** 11 B6 #Sensor replies with current model as **Infrared motion sensor**

Sensor -> Host

55 AC 07 01 04 02 **3C 01** 4C B6 #Sensor replies with current model as **60G health detection sensor**

9.5. Read the version number of the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0067
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000~0xFFFF Version number 0x0103 is: V1.3
BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read the version number of sensor ID=01

Host->Sensor

55 CA 08 01 04 00 67 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **01 03** 13 B6 #The sensor replies that the current version number is **V1.3**

Sensor -> Host

55 AC 07 01 04 02 **01 05** 15 B6 #The sensor replies that the current version number is **V1.5**

9.6. Read the power-on count of the sensor

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0083
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000~0xFFFF
BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read the power-on count of sensor ID=01

Host->Sensor

55 CA 08 01 04 00 83 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **00 09** 18 B6 #The sensor replies that the power-on count is **9**
times

Sensor -> Host

55 AC 07 01 04 02 **00 35** 44 B6 #The sensor replies that the power-on count is
53 times

9.7. Read Sensor Fault Count

Host->Sensor

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xCA: Host sends to sensor
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	High byte of register address	0x0087
BYTE-6	Low byte of register address	
BYTE-7	Register count high byte	0x0001
BYTE-8	Register count low byte	
BYTE-9	Checksum	0xA5: Cumulative checksum/Wildcard check
BYTE-10	Frame tail identifier	0xB6

Sensor -> Host

Byte sequence	Function	Detailed description
BYTE-0	Frame header identifier	0x55
BYTE-1	Direction identifier	0xAC: Sent from sensor to host
BYTE-2	Number of bytes	0x01~0xFF: Number of bytes from BYTE-3 to frame tail
BYTE-3	RS485 Address	0x01~0x63: Sensor address, 0xFF is the broadcast address
BYTE-4	Function Code	0x04
BYTE-5	Number of data items	0x02
BYTE-6	Data high byte	0x0000~0xFFFF
BYTE-7	Data low byte	
BYTE-8	Checksum	Cumulative checksum BYTE-0+BYTE-1+.....BYTE-7
BYTE-9	Frame tail identifier	0xB6

[Example 1] Read Fault Count of Sensor ID=01

Host->Sensor

55 CA 08 01 04 00 87 00 01 A5 B6

Sensor -> Host

55 AC 07 01 04 02 **00 01** 10 B6 #Sensor replies that the fault count is **1 time**

Sensor -> Host

55 AC 07 01 04 02 **00 03** 12 B6 #Sensor replies that the fault count is **3 times**

Read multiple input register addresses continuously [[Read multiple input register addresses continuously](#)], read multiple input register addresses non-continuously [[Read multiple input register addresses non-continuously](#)], other input registers reference [[Read-only input registers](#)], this will not be elaborated here.

Attachment: Register Address Function

Correspondence Table

Address Segment	Address Range	Function
Read/Write Holding Register	0x0001~0x0258	User Parameter Settings, Readable and Writable
Read-Only Holding Register	0x0001~0x01A4	Operating Status Output, Read-Only

Read/Write Holding Register

Register Address (Decimal)	Register Address (Hexadecimal)	Function Description	Value Range	Factory Default Value	Type
1	0x0001	RS Communication Address 485	0x0000: Invalid Value 0x0001: Default Value 0x0000~0x0063: Valid Values	1	General Type
2~6	0x0002~0x0006	Reserved, No Definition Available	-	-	-
7	0x0007	Clear fault codes	0x0000: Invalid Value 0x0001: Clear fault code	0	General Type
8~9	0x0008~0x0009	Reserved, No Definition Available	-	-	-
10	0x000A	Restore factory settings	0x0000: Invalid value 0x0001: Host power-on notification for the sensor to report all register statuses 0x0002: Start sensor to restore factory default parameters 0x0003: Control sensor to enter factory test mode 0x0004: Control sensor to exit factory test mode 0x0005: Control sensor to enter	0	General Type

			network configuration mode		
11	0x000B	Sensing operation paused / status maintained / countdown ends operation starts	0x0000: Sensing operation 0x0001~0x0E10: 0~3600s Sensing operation paused, status maintained (maintaining current status of someone or no one), countdown ends operation 0x270F: 9999s permanent pause	0	General Type
12	0x000C	Sensor Power Switch/Status Reset/Countdown End Run Start	0x0000: Sensor Power On 0x0001~0x0E10: 0~3600s Sensor Power Off, Status Reset (regardless of whether someone is present, output 'No One'), Countdown Ends Power On 0x270F: Permanently Off for 9999s	0	General Type
13	0x000D	System Master Power On/Off/Status Reset	0x0000: Invalid Value 0x0001: Power On 0x0002: Power Off (Status Reset) 0x0003: Restart	0	General Type
14	0x000E	Indicator Light - Interrupt Insert Mode	0x0001: Exit Insert Mode 0x0001: Locate and identify sensor (automatically exits after 30 seconds) 0x0002: Red indicator light always on, do not exit 0x0003: Green indicator light stays on, does not exit 0x0004: Blue indicator light stays on, does not exit 0x0005: Red indicator light blinks slowly once every second, does not exit 0x0006: Green indicator light blinks slowly once every second, does not exit	0	General Type

			0x0007: Blue indicator light blinks slowly once every second, does not exit 0x0008: Red indicator light blinks quickly four times every second, does not exit 0x0009: Green indicator light blinks quickly four times every second, does not exit 0x0010: Blue Indicator Light Blinks Fast for 1 Second 4 Times, Do Not Exit 0x0011: Red Indicator Light Blinks Fast for 1 Second 4 Times, Exit 0x0012: Green Indicator Light Blinks Fast for 1 Second 4 Times, Exit 0x0013: Blue indicator light flashes quickly for 1 second 4 times, exit 0x0014~100: Reserved for customer Indicator light IO control 0xF000 0x01 (bit control) R Red light on 0xF000 0x02 (bit control) G Green light on 0xF000 0x04 (bit control) B Blue light on		
15	0x000F	Indicator Light - Normal Display Mode	0x0000: Invalid value 0x0001: Breathing Light Mode 0x0002: Turn Off Indicator Light Mode 0x0003: Night Light Mode	1	General Type
16	0x0010	Protocol Selection	0x0000: Invalid value 0x0002: Query 0x0003: Active Code Sending 0x0004: Modbus-Rtu	5	General Type

			0x0005: Unified Protocol		
17~18	0x0011 ~0x0012	Reserved, No Definition Available	-	-	-
19	0x0013	Timed Loop Reporting Method	0x0000: Invalid value 0x0001: Fixed Times (Repeat reporting 1-10 times when changed, interval 1 second) 0x0002: Timed (Report once immediately when changed, repeat every 1-3600s) 0x0003: Prohibit Active Reporting (Reply only during query)	1	General Type
20	0x0014	Status change report count	0x0000~0x000A: 0~10 times	1	General Type
21	0x0015	Timed cycle reporting interval (Someone present status)	0x0001~0x0E10: 0~3600s	1	General Type
22	0x0016	Timed cycle reporting interval (No one present status)	0x0001~0x0E10: 0~3600s	1	General Type
23	0x0017	Response code delay additional delay	0x0000~0x0064: 0~100 ms	0	General Type
24	0x0018	Message end checksum method	0x0000: Invalid Value 0x0001: SUM8 *1Byte+0xB6 0x0002: CRC16 *2Byte 0x0003: SUM16 *2Byte 0x0004: Message sequence *1byte + SUM8 *1Byte 0x0005: Custom fixed end symbol *2Byte	1	General Type
25	0x0019	Message terminator	0x0000~0xFFFF (Custom 2 bytes)	0xA5B6	General Type
26	0x001A	Communication baud rate	0x0000: Invalid Value 0x0001: 1200 0x0002: 2400	4	General Type

			0x0003: 4800 0x0004: 9600 0x0005: 19200 0x0006: 38400 0x0007: 57600 0x0008: 115200		
27	0x001B	Communication parity bit	0x0000: Invalid Value 0x0001: No check 0x0002: Odd check 0x0003: Even check	0	General Type
28	0x001C	Communication stop bit	0x0000: Invalid Value 0x0001: 1 bit 0x0002: 2 bits	1	General Type
29	0x001D	Relay/Dry contact automatic manual control (Linkage)	0x0000: Invalid Value 0x0001: Automatic (Linkage sensor) 0x0002: Manual (Non-linkage sensor)	1	60G
30	0x001E	Relay 1/Manual forced output on time	0x0000: No forced output 0x0000~0x05A0: 1-1440 minutes (No status restrictions) During timing: output is in the ON state Timing ended: Automatic mode outputs according to sensing status Manual mode output OFF	0	60G
31	0x001F	Relay 1/Dry contact function selection	0x0000: Invalid Value 0x0001: Present 0x0002: Fall 0x0003: Leave bed (Left/Right) 0x0004: Return to bed (Left/Right) 0x0005: Leave home 0x0006: Return home	2	60G
32	0x0020	Relay/Dry contact contact mode	0x0000: Invalid Value 0x0001: Normally open (Automatic/Manual/Forced) 0x0002: Normally closed	1	60G

			(Automatic/Manual/Forced) 0x0003: Pulse_Normally open (Automatic/Manual/Forced) 0x0004: Pulse_Normally closed (Automatic/Manual/Forced) 0x0005: SQW		
33	0x0021	Relay/Dry contact automatic manual control (Linkage)	0x0000: Invalid value 0x0001: Automatic (Linked sensor) 0x0002: Manual (Non-linked sensor)	2	60G
34~100	0x0022 ~0x0064	Reserved, No Definition Available	-	-	-
101	0x0065	Installation method	0x0000: Invalid 0x0001: Top Mount 0x0002: Wall Mount	0	General Type
102	0x0066	Time for confirmation of someone / Continuous trigger from no one to someone	0x0001~0x0064: 0~100 (unit 0.1 seconds) 0~10 seconds	0	General Type
103	0x0067	No One Delay Time / Delay Hold When Someone Arrives	0x0000~0x0E10: 0~3600 seconds	1	General Type
104	0x0068	Illuminance Threshold - Low Value	0x0000~0x7D00: 0~32000 lux	0	General Type
105	0x0069	Illuminance Threshold - High Value	0x0000~0x7D00: 0~32000 lux	2000	General Type
106	0x006A	Illuminance Reporting Change Threshold	0x0000~0x0064: 0~100%	1	General Type
107	0x006B	Is Light Sensing Enabled	0x0000: Invalid 0x0001: Power on 0x0002: Off	1	General Type
108	0x006C	Working Mode	0x0000: No Such Function 0x0001: Only Measure	2	24G

			Movement (motion) 0x0002: Movement + Stationary (Pres)		
109	0x006D	Distance Setting (Stationary + Movement) Actual Value	0x0096~0x01C2: 150~450 cm (24G Universal Version) 0x0096~0x03E8: 150~1000 centimeters (24G Pro version) 24G:450 24G Pro:1000	450/1000	24G
110	0x006E	Distance setting (static + motion) percentage	0x0000~0x0064: 0~100% (other values invalid)	100	24G
111	0x006F	Sensitivity setting (static + motion)	0x0000~0x0064: 0~100%	50	24G
112~113	0x0070~0x0071	Reserved, No Definition Available	-	-	-
114	0x0072	Life recognition enhancement	0x0000: Invalid 0x0001: On 0x0002: Off	1	24GPro
115~126	0x0073~0x007E	Reserved, No Definition Available	-	-	-
127	0x007F	Application scenario parameter call	0x0000: No Such Function 0x0001: Custom parameters 0x0002: Lighting application 0x0003: Security alarm 0x0004: Hotel power supply	0	24G/60G
128~130	0x0080~0x0082	Reserved, No Definition Available	-	-	-
131	0x0083	Independent adjustment -> micro-motion/motion sensitivity	0x0000~0x0064: 0~100%	50	60G
132	0x0084	Independent adjustment -> static sensitivity (60g corresponds to heart rate)	0x0000~0x0064: 0~100%	50	60G

		sensitivity)			
133	0x0085	Export position and radar straight-line distance	0x0002~0x000F: 2~15 decimeters	10	60G
134	0x0086	Fall alarm timing	0x0000~0x003C: 0~60s	3	60G
135	0x0087	Height after falling down	0x0000~0x0008: 0~8 decimeters	4	60G
136	0x0088	Distance slid out after falling down	0x0000~0x0008: 0~8 decimeters	2	60G
137	0x0089	Bed width size setting	0x0000~0x0018: 0~24 decimeters	14	60G
138	0x008A	Bed length size setting	0x0000~0x001A: 0~26 decimeters	20	60G
139	0x008B	Bed height setting (original lying bed height)	0x0004: 4 decimeters 0x0005: 5 decimeters 0x0006: 6 decimeters 0x0007: 7 decimeters	5	60G
140	0x008C	Distance to trigger movement from the bed	0x0001~0x000A: 1~10 decimeters	2	60G
141	0x008D	Reserved, No Definition Available	-	0	-
142	0x008E	Radar installation offset from bed center X-axis	0xFFFF6~0x000A: -10~10 decimeters	0	60G
143	0x008F	Radar installation offset from bed center Y-axis	0xFFFF6~0x000A: -10~10 decimeters	0	60G
144	0x0090	Number of triggers for leaving the bed height	0x0001~0x0008: 1~8 times	3	60G
145	0x0091	Installation height setting	0x0014~0x0020: 20~32 decimeters	27	60G
146	0x0092	Installation detection range X-axis	0x000A~0x0032: 10~50 decimeters	30	60G
147	0x0093	Installation detection range	0x000A~0x0032: 10~50 decimeters	40	60G

		Y-axis			
148	0x0094	Exit Width (Circular Diameter)	0x0000~0x0003C: 0~60 Decimeters	16	60G
149~160	0x0095~0x00A0	Reserved, No Definition Available	-	-	-
161	0x00A1	Reserved, No Definition Available	-	-	-
162	0x00A2	Near-end Distance Segment 1 Exists	0x0000~0x0140: 0~320 cm	0	ToF
163	0x00A3	Far-end Distance Segment 1 Exists	0x0000~0x0140: 0~320 cm	120	ToF
164	0x00A4	Near-end Distance Segment 2 Exists	0x0000~0x0140: 0~320 cm	0	ToF
165	0x00A5	Far-end Distance Segment 2 Exists	0x0000~0x0140: 0~320 cm	0	ToF
166	0x00A6	Approach and Retreat Trigger (Set Near-end Distance)	0x0000~0x0140: 0~320 cm	100	ToF
167	0x00A7	Approach and Retreat Trigger (Set Far-end Distance)	0x0000~0x0140: 0~320 cm	200	ToF
168	0x00A8	Approach and Retreat Trigger (Limit Movement Time)	0x0000~0x003C: 0~60s	5	ToF
169	0x00A9	Distance Segment Length A (Near Radar End)	0x0000~0x0140: 0~320 cm	100	ToF
170	0x00AA	Distance Segment Length B	0x0000~0x0140: 0~320 cm	100	ToF
171	0x00AB	Distance Segment Length C (Far From Radar End)	0x0000~0x0140: 0~320 cm	100	ToF
172	0x00AC	Distance Segment Occupancy A Trigger Time	0x0000~0x0258: 0~600s Trigger if Exceeds Set Time	5	ToF
173	0x00AD	Distance Segment	0x0000~0x0258: 0~600s	5	ToF

		Occupancy Trigger Time	Trigger if Exceeds Set Time		
174	0x00AE	Distance segment C trigger time	0x0000~0x0258: 0~600s Trigger if Exceeds Set Time	5	ToF
175	0x00AF	ToF detection mode	0x0000: Invalid value 0x0001: Short distance (high speed, maximum range 1.3 meters) 0x0002: Medium distance (medium speed, maximum range 2.9 meters) 0x0003: Long distance (low speed, maximum range 3.2 meters)	0	ToF
176~299	0x00B0 ~0x012B	Reserved, No Definition Available	-	-	-
300	0x012C	Moving segment 00 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
301	0x012D	Moving segment 01 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
302	0x012E	Moving segment 02 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
303	0x012F	Moving segment 03 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
304	0x0130	Moving segment 04 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
305	0x0131	Moving segment 05 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
306	0x0132	Moving segment 06 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
307	0x0133	Moving segment 07 threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G

308	0x0134	Moving segment 08 threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G
309	0x0135	Moving segment 09 threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G
310	0x0136	Moving segment 10 threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G
311	0x0137	Moving segment 11 threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G
312~319	0x0138 ~0x013F	Reserved, No Definition Available	-	-	-
320	0x0140	Stationary segment 00 threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
321	0x0141	Stationary Segment 01 Threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
322	0x0142	Stationary Segment 02 Threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
323	0x0143	Stationary Segment 03 Threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
324	0x0144	Stationary Segment 04 Threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
325	0x0145	Stationary Segment 05 Threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
326	0x0146	Stationary Segment 06 Threshold	0x0000~0x0064: 0~100% Applicable to 24G General Version and 24G Pro Version	50	24G
327	0x0147	Stationary Segment 07 Threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G
328	0x0148	Stationary Segment 08 Threshold	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G
339	0x0149	Stationary Segment 09	0x0000~0x0064: 0~100% Applicable to 24G Pro version	50	24G

		Threshold			
330~600	0x014A ~0x0258	Reserved, Definition Available	No	-	-

Read-Only Input Register

Register Address (Decimal)	Register Address (Hexadecimal)	Function Description	Value Range	Type
1	0x0001	Light On/Off Scene (Someone + Illuminance Condition Met)	0x0000: Suggest to turn off the light when no one is present or the illuminance condition is met 0x0001: Suggest to turn on the light when someone is present and the illuminance condition is met	General Type
2	0x0002	Someone/No One (Delay Hold)	0x0000: No One Detection of no one exceeds the set delay time 0x00001: Someone Induction detects significant movement/micro-movement/standing still + delay	General Type
3	0x0003	Action Amplitude (Real-time status)	0x0000: No One 0x0001: Movement 0x0002: Still	General Type
4	0x0004	Real-time illumination value	0x0000~0x7D00: 0~32000lux Real-time illumination value High Byte * 256 + Low Byte	General Type
5	0x0005	Real-time illumination level	0x0000: Invalid Value 0x0001: Low Illumination Illumination < Low Value 0x0002: Medium Illumination Low Value < Illumination < High Value 0x0003: High Illumination Illumination > High Value	General Type
6	0x0006	Target real-time distance	ToF 0x0000~0x0140: 0~320 cm	ToF/24G

			24G 0x0000~0x03E8: 0~1000 cm	
7	0x0007	Motion Posture	0x0000: No trigger → Induction detects no one 0x0001: Fall 0x0002: Stay → Still or micro-movement 0x0003: Walking → Significant movement	60G
8	0x0008	Leave Bed Trigger	0x0000: No trigger 0x0001: Left bed 0x0002: Right bed 0x0003: Left Bed Return 0x0004: Right Bed Return	60G
9	0x0009	Leave Area Trigger	0x0000: No trigger 0x0001: Leave Area 0x0002: Enter Area	60G
10	0x000A	Approach and Move Away Trigger	0x0000: No trigger 0x0001: Approach Trigger 0x0002: Move Away Trigger	ToF
11	0x000B	Distance Segment Trigger	0x0000: No trigger 0x0001: Distance Segment A Occupied 0x0002: Distance Segment B Occupied 0x0003: Distance Segment C Occupied	ToF
12	0x000C	Stay Timeout Trigger	0x0000: No trigger 0x0001: Distance Segment A Stay Timeout 0x0002: Distance Segment B Stay Timeout 0x0003: Distance Segment C Stay Timeout	ToF
13	0x000D	Programming/Network Configuration Key Trigger	0x0000: No trigger 0x0001: Remote Control/Key Trigger for Programming or Network Configuration Mode	
14	0x000E	Reserved, No Definition Available	-	-
15	0x000F	System status notification	0x0000: Invalid Value 0x0001: Sensor power-on initialization completed, notifying host 0x0002: Sensor notifying host to restore factory default parameters 0x0003: Sensor notifying host to enter	General Type

			factory test mode 0x0004: Sensor notifying host to exit factory test mode	
--	--	--	---	--

16	0x0010	Maintain presence/occupancy time trigger	0x0000: No trigger 0x0001: Presence/occupancy started 0x0002: Occupancy time > 1 minute 0x0003: Occupancy time > 3 minutes 0x0004: Occupancy time > 5 minutes 0x0005: Occupancy time > 10 minutes 0x0006: Occupancy time > 15 minutes 0x0007: Occupancy time > 30 minutes 0x0008: Occupancy time > 1 hour 0x0009: Occupancy time > 2 hours 0x000A: Occupancy time > 3 hours 0x000B: Occupancy time > 4 hours 0x000C: Occupancy time > 5 hours 0x000D: Occupancy time > 6 hours 0x000E: Occupancy time > 7 hours 0x000F: Occupancy time > 8 hours 0x0010: Occupancy time > 9 hours 0x0011: Occupancy time > 10 hours 0x0012: Occupancy time > 12 hours 0x0013: Occupancy time > 14 hours 0x0014: Occupancy time > 16 hours 0x0015: Occupancy time > 18 hours 0x0016: Occupancy time > 20 hours 0x0017: Occupancy time > 22 hours 0x0018: Occupancy time > 24 hours	General Type
17	0x0011	Maintain One/Idle Trigger	0x0000: No trigger 0x0001: No One/Idle Start 0x0002: Idle Time > 01 Minute 0x0003: Idle Time > 03 Minutes 0x0004: Idle Time > 05 Minutes 0x0005: Idle Time > 10 Minutes 0x0006: Idle Time > 15 Minutes 0x0007: Idle Time > 30 Minutes 0x0008: Idle Time > 1 Hour 0x0009: Idle Time > 2 Hours 0x000A: Idle Time > 3 Hours 0x000B: Idle Time > 4 Hours 0x000C: Idle Time > 5 Hours 0x000D: Idle Time > 6 Hours 0x000E: Idle Time > 7 Hours	General Type

			0x000F: Idle Time > 8 Hours 0x0010: Idle Time > 9 Hours 0x0011: Idle time > 10 hours 0x0012: Idle time > 12 hours 0x0013: Idle time > 14 hours 0x0014: Idle time > 16 hours 0x0015: Idle time > 18 hours 0x0016: Idle time > 20 hours 0x0017: Idle time > 22 hours 0x0018: Idle time > 24 hours	
18	0x0012	Hold active time trigger	0x0000: No trigger 0x0001: Start active motion 0x0002: Active time > 01 minute 0x0003: Active time > 03 minutes 0x0004: Active time > 05 minutes 0x0005: Active time > 10 minutes 0x0006: Active time > 15 minutes 0x0007: Active time > 30 minutes 0x0008: Active time > 1 hour 0x0009: Active time > 2 hours 0x000A: Active time > 3 hours 0x000B: Active time > 4 hours 0x000C: Active time > 5 hours 0x000D: Active time > 6 hours 0x000E: Active time > 7 hours 0x000F: Active time > 8 hours 0x0010: Active time > 9 hours 0x0011: Active time > 10 hours 0x0012: Active time > 12 hours 0x0013: Active time > 14 hours 0x0014: Active time > 16 hours 0x0015: Active time > 18 hours 0x0016: Active time > 20 hours 0x0017: Active time > 22 hours 0x0018: Active time > 24 hours	General Type
19	0x0013	Hold still time trigger	0x0000: No trigger 0x0001: Stillness start 0x0002: Stillness time > 01 minute 0x0003: Idle time > 03 minutes 0x0004: Idle time > 05 minutes	24G

			0x0005: Idle time > 10 minutes 0x0006: Idle time > 15 minutes 0x0007: Idle time > 30 minutes 0x0008: Idle time > 1 hour 0x0009: Idle time > 2 hours 0x000A: Idle time > 3 hours 0x000B: Idle time > 4 hours 0x000C: Idle time > 5 hours 0x000D: Idle time > 6 hours 0x000E: Idle time > 7 hours 0x000F: Idle time > 8 hours 0x0010: Idle time > 9 hours 0x0011: Idle time > 10 hours 0x0012: Idle time > 12 hours 0x0013: Stationary time > 14 hours 0x0014: Stationary time > 16 hours 0x0015: Stationary time > 18 hours 0x0016: Stationary time > 20 hours 0x0017: Stationary time > 22 hours 0x0018: Stationary time > 24 hours	
14~33	0x0014 ~0x0021	Reserved, No Definition Available	-	-
34	0x0022	Moving target energy	0x0000~0xFFFF: 0~65535	24G
35	0x0023	Stationary target energy	0x0000~0xFFFF: 0~65535	24G
36	0x0024	Moving target distance	24G 0x0000~0x01C2: 0~450cm 24G Pro 0x0000~0x03E8: 0~1000cm	24G
37	0x0025	Stationary target distance	24G 0x0000~0x01C2: 0~450cm 24G Pro 0x0000~0x03E8: 0~1000cm	24G
26~60	0x0026 ~0x003C	Reserved, No Definition Available	-	-
61	0x003D	Breathing frequency value	0x0000~0x003C: 0~60	60G

62	0x003E	Heart rate value	0x0000~0x00C8: 0~200	60G
63~100	0x003F ~0x0064	Reserved, No Definition Available	-	-

101	0x0065	Product model	0x0101: Infrared motion sensor 0x0201: ToF distance sensor 0x0501: High-altitude motion sensor 0x0A01: Hand-sweep radar 0x1801: 24G millimeter-wave presence sensor 0x1901: 24G Pro millimeter-wave presence sensor 0x3C01: 60G health detection sensor 0x3D01: 60G counting radar	General Type
102	0x0066	Model-Series-Communication method	High 8 bits: Series Low 8 bits: Communication method For example: 0x0101 R1 series dry contact 0x0502 R5 series 485 0x0902 Mini series 485	General Type
103	0x0067	Master control software version number	0x0000~0xFFFF: 0~65535 For example: 0x0103 indicates version V1.3	General Type
104	0x0068	Customized master control software version number	0x0000~0xFFFF: 0~65535 For example: 0x0103 indicates version V1.3	General Type
105	0x0069	Algorithm software version number A	0x0000~0xFFFF: 0~65535 For example: 0x0103 indicates version V1.3	General Type
106	0x006A	Algorithm software version number B	0x0000~0xFFFF: 0~65535 For example: 0x0103 indicates version V1.3	General Type
107~110	0x006B ~0x006E	Reserved, No Definition Available	-	-
111	0x006F	Unique serial number SN 6-1	0x0000~0xFFFF: 0~65535	General Type
112	0x0070	Unique serial number SN 6-1	0x0000~0xFFFF: 0~65535	General Type
113	0x0071	Unique serial	0x0000~0xFFFF: 0~65535	General

		number SN 6-1		Type
114	0x0072	Unique serial number SN 6-1	0x0000~0xFFFF: 0~65535	General Type
115	0x0073	Unique serial number SN 6-1	0x0000~0xFFFF: 0~65535	General Type
116	0x0074	Unique serial number SN 6-1	0x0000~0xFFFF: 0~65535	General Type
117~130	0x0075~0x0082	Reserved, No Definition Available	-	-
131	0x0083	Total power-on count accumulated	0x0000~0xFFFF: 0~65535	General Type
132	0x0084	Current power-on running time in minutes	0x0000~0xFFFF: 0~65535	General Type
133	0x0085	Total running time in days accumulated	0x0000~0xFFFF: 0~65535	General Type
134	0x0086	Total running time not reaching a full day accumulated in minutes	0x0000~0x05A0: 0~1400	General Type
135	0x0087	Fault count accumulated	0x0000~0xFFFF: 0~65535	General Type
136~199	0x0088~0x00C7	Reserved, No Definition Available	-	-
200	0x00C8	Personnel counting value	0x0000~0x7D00: 0~32000	60G
201	0x00C9	Target 1 trajectory coordinate X-axis	0xF800~0x0800: -2048~+2048 centimeters That is -20 meters~+20 meters If it exceeds the coordinate axis, output 0x0800	60G
202	0x00CA	Target 1 trajectory coordinate Y-axis	0xF800~0x0800: -2048~+2048 centimeters That is -20 meters~+20 meters If it exceeds the coordinate axis, output 0x0800	60G
203	0x00CB	Target 1 trajectory coordinate Z (height)	0x0000~0x0800: 0~2048 centimeters That is 0 meters~+20 meters If it exceeds the coordinate axis, output 0x0800	60G
204~210	0x00CC	Reserved, No	-	-

	~0x00D2	Definition Available		
211	0x00D3	Target 2 trajectory coordinate X-axis	0xF800~0x0800: -2048~-+2048 centimeters That is -20 meters~-+20 meters If it exceeds the coordinate axis, output 0x0800	60G
212	0x00D4	Target 2 trajectory coordinate Y-axis	0xF800~0x0800: -2048~-+2048 centimeters That is -20 meters~-+20 meters If it exceeds the coordinate axis, output 0x0800	60G
213	0x00D5	Target 2 trajectory coordinate Z (height)	0x0000~0x0800: 0~2048 centimeters That is 0 meters~-+20 meters If it exceeds the coordinate axis, output 0x0800	60G
214~220	0x00D6 ~0x00DC	Reserved, No Definition Available	-	-
221	0x00DD	Target 3 trajectory coordinate X-axis	0xF800~0x0800: -2048~-+2048 centimeters That is -20 meters~-+20 meters If it exceeds the coordinate axis, output 0x0800	60G
222	0x00DE	Target 3 trajectory coordinate Y-axis	0xF800~0x0800: -2048~-+2048 centimeters That is -20 meters~-+20 meters If it exceeds the coordinate axis, output 0x0800	60G
223	0x00DF	Target 3 trajectory coordinate Z (height)	0x0000~0x0800: 0~2048 centimeters That is 0 meters~-+20 meters If it exceeds the coordinate axis, output 0x0800	60G
224~299	0x00E0 ~0x012B	Reserved, No Definition Available	-	-
300	0x012C	Movement segment 00 energy	0x0000~0xFFFF: 0~65535	24G
301	0x012D	Movement segment 01 energy	0x0000~0xFFFF: 0~65535	24G
302	0x012E	Movement segment 02 energy	0x0000~0xFFFF: 0~65535	24G
303	0x012F	Mobile Segment 03 Energy	0x0000~0xFFFF: 0~65535	24G
304	0x0130	Mobile Segment 04 Energy	0x0000~0xFFFF: 0~65535	24G
305	0x0131	Mobile Segment 05	0x0000~0xFFFF: 0~65535	24G

		Energy		
306	0x0132	Mobile Segment 06 Energy	0x0000~0xFFFF: 0~65535	24G
307	0x0133	Mobile Segment 07 Energy	0x0000~0xFFFF: 0~65535	24G
308	0x0134	Mobile Segment 08 Energy	0x0000~0xFFFF: 0~65535	24G
309	0x0135	Mobile Segment 09 Energy	0x0000~0xFFFF: 0~65535	24G
310	0x0136	Mobile Segment 10 Energy	0x0000~0xFFFF: 0~65535	24G
311	0x0137	Mobile Segment 10 Energy	0x0000~0xFFFF: 0~65535	24G
312~349	0x0138 ~0x015D	Reserved, No Definition Available	-	-
350	0x015E	Stationary Segment 00 Energy	0x0000~0xFFFF: 0~65535	24G
351	0x015F	Stationary Segment 01 Energy	0x0000~0xFFFF: 0~65535	24G
352	0x0160	Stationary Segment 02 Energy	0x0000~0xFFFF: 0~65535	24G
353	0x0161	Stationary Segment 03 Energy	0x0000~0xFFFF: 0~65535	24G
354	0x0162	Stationary Segment 04 Energy	0x0000~0xFFFF: 0~65535	24G
355	0x0163	Stationary Segment 05 Energy	0x0000~0xFFFF: 0~65535	24G
356	0x0164	Stationary Segment 06 Energy	0x0000~0xFFFF: 0~65535	24G
357	0x0165	Stationary Segment 07 Energy	0x0000~0xFFFF: 0~65535	24G
358	0x0166	Stationary Segment 08 Energy	0x0000~0xFFFF: 0~65535	24G
359	0x0167	Stationary Segment 09 Energy	0x0000~0xFFFF: 0~65535	24G
360~420	0x0168 ~0x01A4	Reserved, No Definition Available	-	-

Creatrol Intelligence Co.,Ltd

TEL:(+86)21-54325789

EMAIL:contact@creatrol.com

WEB:www.creatrol.com/en/

ADD:7F,buildingC,No.7001,ZhongchunRoad,MinhangDistrict,Shanghai



造作
CREATROL