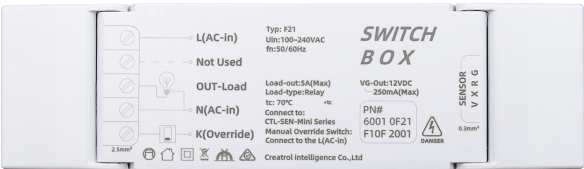


BOX-AC-S1+

The BOX-AC-S1+ (Model: CTL-SEN-BOX/F21) is a high-capacity power supply and switching actuator engineered for the Mini Series sensor ecosystem. This unit serves as a dual-purpose module, converting AC power for sensor operation while providing robust relay control for loads up to 1 kW. Its elongated, slim profile is specifically designed for concealed installation in ceiling voids or wall boxes, enabling smart control without requiring a central gateway.



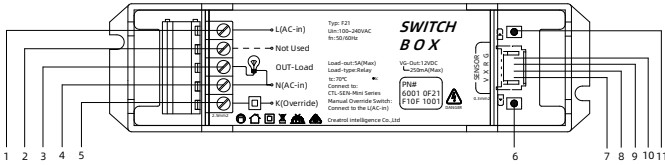
Features

- Equipped with a heavy-duty relay supporting up to 5 A or 1 kW loads, suitable for larger lighting circuits.
- Efficiently converts AC 100 to 240 V input into a stable DC 12 V (≤ 250 mA) output to power connected sensors.
- Features a dedicated terminal for external switch panels, allowing for manual control over the relay state.
- Includes an integrated physical test button to verify relay operations (Close/ON when pressed, Open/OFF when released).

Specifications

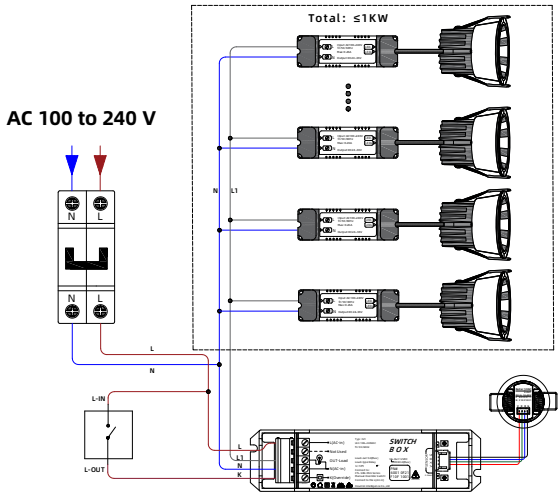
Input Voltage	AC 100 to 240 V (50/60 Hz)
Output Voltage	DC 12 V (Max 250 mA)
Relay Load	Max 1kW / 5 A
Dimensions	121 mm × 26 mm × 35 mm
Weight	88 g
Terminal Capacity	0.5 to 2.5 mm ²
Operating Temperature	-20 to 45°C (Indoor)
Storage Temperature	-40 to 85°C
Housing Material	Flame-retardant PC (UL94 V-0)
IP Rating	IP20
Color	White

Interface

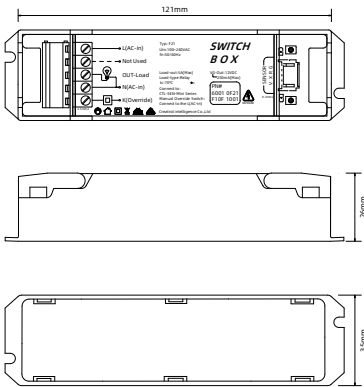


1. L: AC 100 to 240 V Live wire input.
2. Not Used: Reserved terminal.
3. OUT-Load: AC Relay output (Max. 1 kW).
4. N: AC 100 to 240 V Neutral wire input.
5. K (Override): External manual switch input for relay control.
6. Physical Button 2: Reserved.
7. V: DC 12 V Positive output.
8. X: Reserved.
9. R: Signal Input (Active High); High triggers Relay ON, Low triggers Relay OFF.
10. G: DC Output Ground (GND).
11. Physical Button 1: Relay output test button.

Wiring Diagram



Dimensions



Safety

1. Disconnect main power before wiring.
2. Use safety-certified cables and strictly follow the wiring diagram.
3. Ensure input voltage is within range and do not exceed the rated load.
4. Periodically inspect terminal blocks for secure connections.