

# PW-600T

Intelligent Heat Detector

### Description

PW-600T is an intelligent heat detector. Its core components adopt a high-precision temperature sensor and combine with intelligent algorithms that can adapt to numerous scenarios, and can detect or pin-point fire event accurately and timely. The detector is compatible with fire alarm system to provide protection for open areas.

The detector has a 360° visible LED indicator light that blinks when the detector is in the monitoring state. When the detector alarm, the controller sends a command to make the indicator latched in a steady condition. When the controller is reset, the detector returns to the normal monitoring state and the indicator blinks in a polling state. The indicator blink light can be disabled when special needs are required.

PW-600T is a two-wire bus detector, and its communication line adopts non-polarity wiring design, which is convenient for on-site wiring installation.



### Specifications

- Rated Voltage:** DC24V.
- Standby Current:** 370µA@DC24V.
- Alarm Current:** 1.5mA@DC24V.
- Alarm Temperature:** 60°C.
- Product Category:** A2.
- Operating Temperature:** -10°C ~ 55°C.
- Operating Humidity:** 5% ~ 95%RH Non-condensing.
- Dimension:** Φ103×49mm (Including base).
- Weight:** 55g.
- Software Version:** A.
- Carried Standard:** GB 4716-2005.

### Addressing

PW-600T is an intelligent detector, each detector in the loop must be uniquely addressed, its address is set by address coder/decoder handheld programmer CP600M, address range: 1~230. Please refer to the CP600M instructions for specific operations.

### Terminal Description

PW-600T detector is used with P601 detector base, and its wiring terminals are defined as follows:

1	Communication
2	Communication

### Power Supply and Wiring

#### Power supply instruction

The design of the system is determined by calculation of the number of detectors allowed in the loop according to the load capacity of the controller or power supply, ensuring that the sum of the current consumed by all devices in the loop does not exceed the load capacity of the controller or power supply. In the loop calculation, it is necessary to consider the voltage drop caused by the resistance of the line.

#### Resistance of general wiring sizes

- 1.0 mm<sup>2</sup> 19.5Ω/1000m
- 1.5 mm<sup>2</sup> 13.3Ω/1000m
- 2.5 mm<sup>2</sup> 7.98Ω/1000m

For example, if there are 10 devices in a certain area and each device needs 10mA, connect them with 1.5mm<sup>2</sup> lines of 2000m (total line length = line length in operation + line length returned), and the current at the end of the line is 10mA, then: Number of devices x terminal current x (total length of lines x wire resistivity) = voltage drop, 10 x 10 mA x (2000m x 13.3 ohms /1000m) ≈ 2.7V

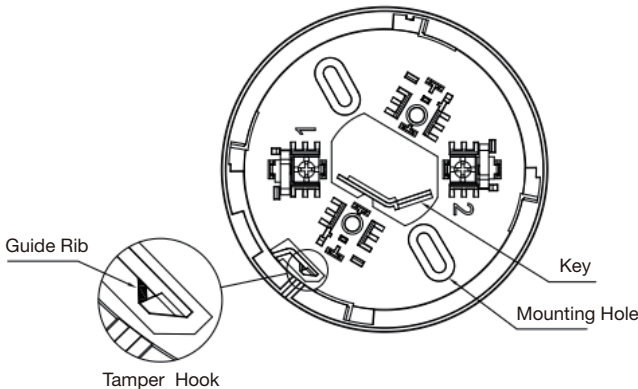


Figure 1: P601 Detector Base



Wiring

PW-600T detector is used with P601 detector base. Wiring diagram as shown in Figure 2. This detector adopts non-polarity wiring design, does not distinguish positive and negative poles.

Mounting

Install the detector base at the preset installation position.
NOTE: The tamper device is not enabled on the detector base by default. If the tamper device needs to be enabled, please first remove the guide rib on the tamper hook, remove and keep the key (as shown in Figure 1), for use when removing the detector.

Disconnect the power supply of the loop and wiring according to the wiring diagram (Figure 2).
Use the address coder/decoder handheld programmer CP600M to address the detector.
Rotate the detector clockwise into the base of the detector to complete the installation.

Testing

Detectors must be tested after installation and after each regular maintenance.

NOTE: Before the test, please inform the relevant management department to disconnect the logic control function of the system in the maintenance area to avoid unnecessary alarm linkage. The system will temporarily stop working while the detector is being maintained.

The detector of this model can use heat gun (1-1.5kW) or hair dryer with the same effect to directly blow hot air from the inlet window of the detector (arrow in Figure 3). The detector should give an alarm when the temperature reaches 70°C, and the indicator light changes from blinking to a latching steady state.

After the controller is reset, the detector returns to the normal monitoring state and the indicator light blinks.

Remove

Tamper not enabled

For the detector with the tamper not enabled, the detector can be removed by rotating the detector in the direction shown by the arrow in Figure 4.

Tamper enabled

For the detector with tamper enabled, push the key from the position shown in Figure 4 with moderate force and rotate the detector in the direction indicated by the arrow in Figure 4 to remove the detector.

Ordering Information

- PW-600T: Intelligent Heat Detector.
PW-600T/C\*: Intelligent Heat Detector. (CLIP model for legacy system).
P601: Detector Base.
NOTE: "IC" is ordering suffix and will not show on product label.

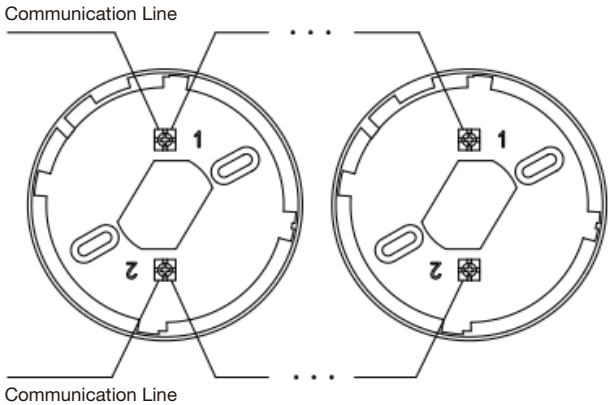


Figure 2: Wiring Diagram

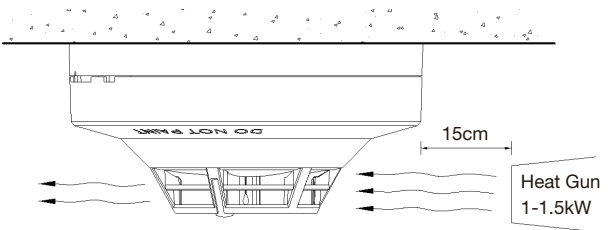


Figure 3: Testing

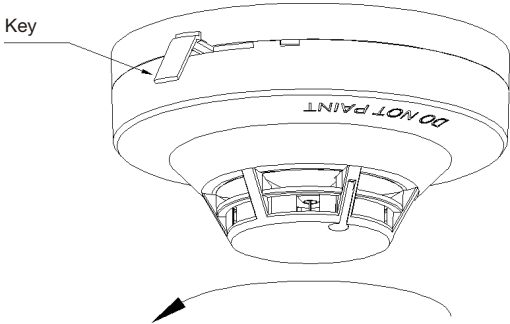


Figure 4: Remove

