

Operating instruction

Warm tips: Please keep this product specification properly and read it carefully before use.

1 Security considerations

1.1 Dangerous matters

- a) Avoid any liquid entering the equipment to avoid damage or danger;
- b) Do not block the black body heat outlet during work.

1.2 Warning

- a) To ensure that your input voltage is consistent with the voltage specified in the electrical rating (220V 50Hz);
- b) Check power supply and accessories for damaged before using;
- c) Please use the official cables;
- d) Do not use wet hands to plug in power or operate the control panel.

2 Blackbody Structure and Control Panel

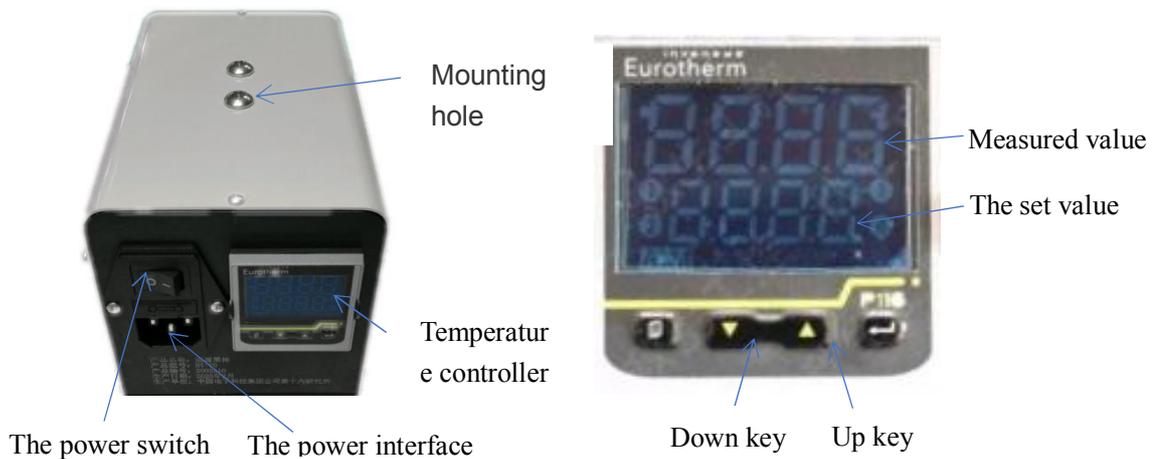


FIG. 1 Product structure diagram and control panel

Attachment: power cord ×1

3 Blackbody installation and instructions

3.1 Placement instructions

Place the blackbody in a fixed position, make sure to leave a space of up to 10cm on both sides of the cooling hole, and keep away from combustible materials and place firmly. Can be installed on the tripod through the blackbody bottom mounting hole, also can be lifted through the top mounting hole.

3.2 Blackbody installation

- a) Connect the power cord to the blackbody power interface and plug the power cord into the 220 V/50Hz independent power supply;
- b) Place the blackbody in a stable position, and align the radiant surface to need to calibrate the infrared thermometer
- c) Turn on the power supply of the equipment, the temperature controller shows normal, then the blackbody works normally.

3.3 Product instructions

- a) Click the “up” or “down” button to adjust the temperature setting value to a specific

temperature, then release the “up” or “down” button. Note that the temperature range is set to environment +5°C~50°C.

- b) After waiting for a few minutes, the measured blackbody temperature can be stabilized within the set value of 0.1°C, then the calibration of the infrared thermometer can be started.
- c) After the use of the blackbody, turn off the blackbody power button, unplug the power cord, and put it into the packing box for storage.

4 Blackbody cleaning and maintenance

- a) The blackbody radiation surface is the calibration surface of the infrared thermometer, so it is necessary to pay attention to protect the blackbody radiant surface coating, and pay attention to the coating intact and clean, in order to ensure that the blackbody radiation temperature meets the requirements of the thermometer;
- b) Blackbody radiation surface covered with dust can be blown dry by blowing tools, it is strictly prohibited to wipe with organic solvents to prevent damage to blackbody coating.
- c) If the equipment is not used for a long time, the power is cut off and stored in the packing box.
- d) Some invisible electrical parts or places that are not easy to clean and maintain shall be cleaned and maintained by professional technicians, and the black body shall not be disassembled or disassembled by itself blindly.

5 Blackbody troubleshooting

5.1 blackbody cannot be opened normally

Check whether the cables are tightly connected and whether the power supply meets the requirements.

5.2 Blackbody temperatures are unstable

If the blackbody temperature can not be stable (± 0.1 C) at the set temperature, contact the technician for the blackbody self-tuning setting troubleshooting.

5.3 blackbody radiation temperature deviation

Check whether the blackbody radiant surface is covered with dust or whether the coating is damaged. If the coating is covered with dust, clean it with blowing tool. If the coating is damaged, return to the factory for maintenance.

5.4 other faults

If the temperature control instrument is maloperated and can not be recovered, or encounter other failures, please contact technical support personnel to solve.

Technical parameters



| Serial number | Performance parameter | Technical indicators |
|---------------|-----------------------|-----------------------|
| 1 | Aperture | 70mm×70mm |
| 2 | Temp.range | Environment +5℃ ~ 50℃ |
| 3 | Effective emissivity | 0.97±0.02 |
| 4 | Stability | ±0.1℃ |
| 5 | Resolution ratio | 0.01℃ |
| 6 | Slew rate | 5℃/min |
| 7 | Power supply | 220VAC 50Hz |
| 8 | Head size H×D×W | 125mm×195mm×120mm |
| 9 | Weight | 2.2kg |