

IT-5 Infrared Thermometer Datasheet

IT-5 Highlights

IT-5 infrared thermometer is a compact and integrated temperature sensor for OEM applications. It delivers reliable accuracy and rugged durability for an economical price. IT-5 thermometer can measure target temperatures from 300-1000°C and 400-1200°C.

The thermometer's onboard electronics are protected by a small aluminium housing (IP65) whose diameter is only 24mm, allowing the sensor to work in ambient temperature up to 60°C without cooling. With the strong anti-electromagnetic interference, IT-5 thermometer can also work at a distance of 100mm from the high frequency induction coil.

IT-5 infrared thermometer features coaxial laser sighting. The optical resolution is 150:1 and the smallest measured spot size is 2mm. Laser sighting and high-resolution of the thermometer provide solution for either small targets or long-distance measurements. IT-5 series can be equipped with a compact, value-priced monitor that configures the functions via the front panel.

IT-5 infrared thermometer is accurate, rugged, affordable, easy to install & operate for welding industry of carbide saw blade, diamond saw blade, spectacle frame and so on.

Measurement Specifications:

Temperature Ranges:

IT-5H1	300-1000°C
IT-5H2	400-1200°C

Detector

IT-5H1, IT-5H2	InGaAs 1-1.7µm
----------------	----------------

Accuracy

IT-5H1, IT-5H2	±1%(FS)
----------------	---------

Repeatability

±0.2%

Temperature Resoution

0.5°C

Response Time

≤5ms

Optical Specifications:

Typical Spot Size at Minimum Focus Distance

Models	D:S	Minimum Spot Size
All series	150:1	2mm@300mm

Electrical Specifications:

Outputs

Analog	0-20mA, 4-20mA, 0-5V
Digital	RS485

Power Supply

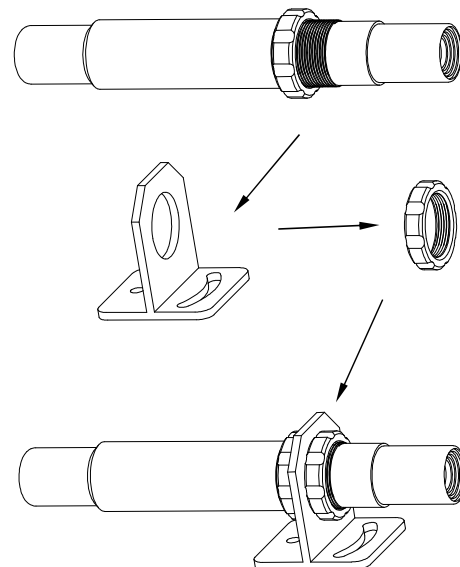
24VDC ±10% 200mA



General Specifications:

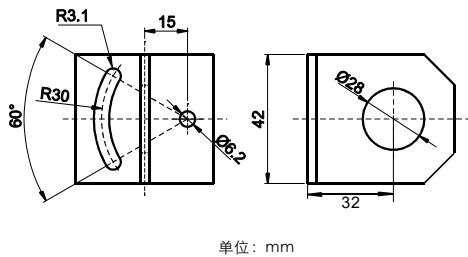
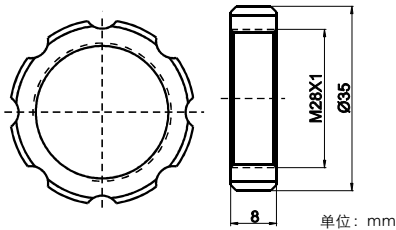
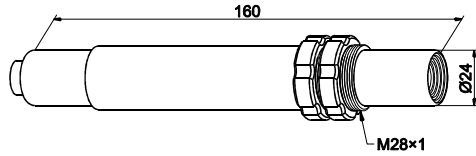
Environmenta Rating	IP65
Ambient Temperature	
Without cooling	0-65°C
With air cooling	110°C
With water cooling	165°C
Storage Temperature	-20-70°C
Relative Humidity	10-95%, non-condensing
Thermal Shock	GB/T2423.1, GB/t2423.2
Anti Disturbance	JB/T9233.11-1999
Dimension	L:max160mm; Φ28mm
Weight	510g

Sensor and Fixed Bracket:



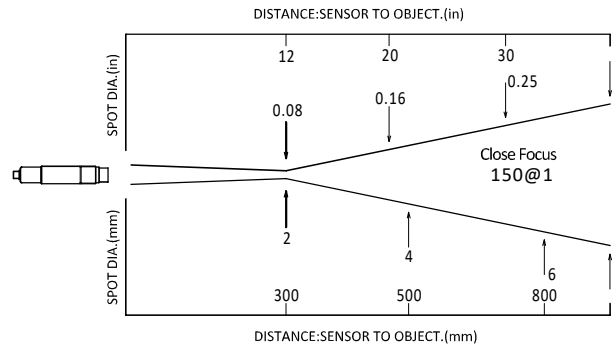
IT-5 Infrared Thermometer Datasheet

Dimension :



NOTES: All dimensions are in millimeters.

Optical Specifications



Options

Options must be specified at time of order

- Manufacturer's calibration certificate based on Q/DK001-2015

Accessories

- RS232/485 converter serving for stand-alone or multiple sensors
- Protective Windows according to spectral range
- Cable extensions in different lengths
- Water/Air Cooled Housing for field retrofit as stainless steel or aluminium
- Extra rugged cast metal housing for thermal/mechanical environmental protection