

IRPT Wide Range High-accuracy Infrared Pyrometer

IRPT Highlights

IRPT Series is a wide range and High-accuracy thermometer that can be used in many heat processing conditions. It's size is small and easy to install. The stainless housing can be used in harsh environment durably.

IRPT Series includes several wavelengths that can be widely used. The temperature range can be covered from 25°C to 3000°C, thus give the customer a convenience to measure different materials with different temperature measuring needs. It's a cost saving equipment and simple to maintain.

The temperature can be shown on the high-light screen instantly when the equipment is working. The control panel allows the user to calibrate data on the spot if there is necessary. Coaxial laser aiming helps to fix the object. The diameter of the laser spot is less than 3mm, it will not divergent with the distance change.

Analog and digital output are available. RS422 output support high speed digital collecting, if supported by Dikai software, it can realize 1 k/s data transmission and storage.

Products Recommendation:

IRPTL-W-1550 Metal, ceramic, graphite, sintered glass

IRPTL-W-2600 Aluminum and other bright metals

IRPTL-W-3300 Epi MOCVD, Thin film PE and PP

IRPTH-W-5000 MOCVD, glass annealing process

IRPTH-W-5200 Quartz materials such as optical fiber preforms

Measurement Specifications:

Temperature Ranges:

IRPTL-W-1550	200-3000°C
IRPTL-W-2600	25-1625°C
IRPTL-W-3300	300-1300°C
IRPTH-W-5000	50-1300°C
IRPTH-W-5200	500-2500°C

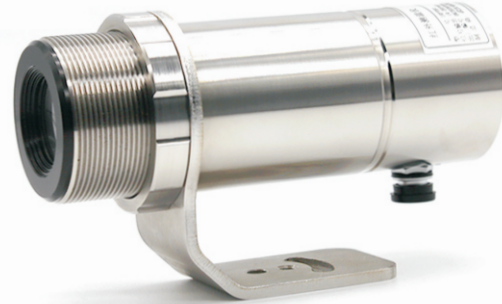
Detector

IRPTL-W-1550	1550nm
IRPTL-W-2600	2460nm
IRPTL-W-3300	3300nm
IRPTH-W-5000	5000nm
IRPTH-W-5200	5200nm

Accuracy

IRPTL-W-1550	读数的0.15% (±3°C)
IRPTL-W-2600	读数的0.15% (±3°C)
IRPTL-W-3300	±3°C
IRPTH-W-5000	±3°C
IRPTH-W-5200	读数的0.15% (±3°C)

Repeatability ±0.2%



Temperature Resolution 0.01°C

Response Time

IRPTL-W-1550/2600 ≤1.5ms

IRPTL-W-3300 IRPTH-5000/5200 ≤50ms

Emissivity 0.10 to 1.00 (0.01)

Optical Specifications:

Typical Spot Size at Minimum Focus Distance

Models	D:S	Minimum Spot Size Diameter
All Series	70:1	2mm@140mm

Electrical Specifications:

Outputs

Analog	0-20mA, 4-20mA, 0-5V
Digital	RS422

Adjustable	Emissivity setting
	Laser control
	Working mode
	Response time

Power Supply 24VDC ±20% 500mA

General Specifications:

Environmental 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

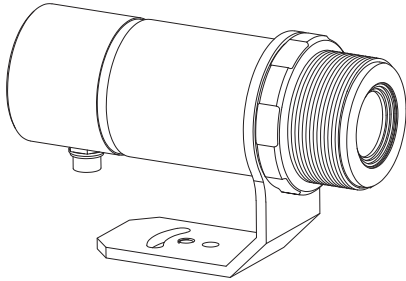
Anti Disturbance JB/T9233.11-1999

Dimension L: max139mm; Φ50mm

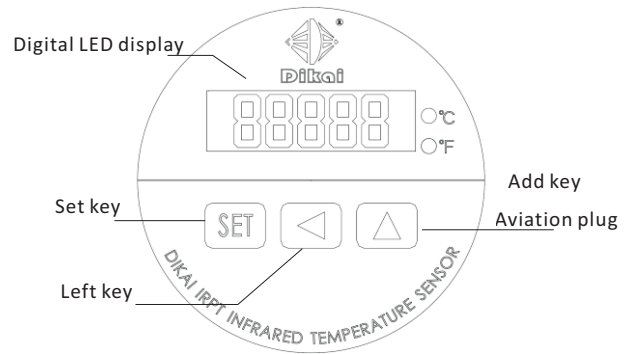
Weight 600g

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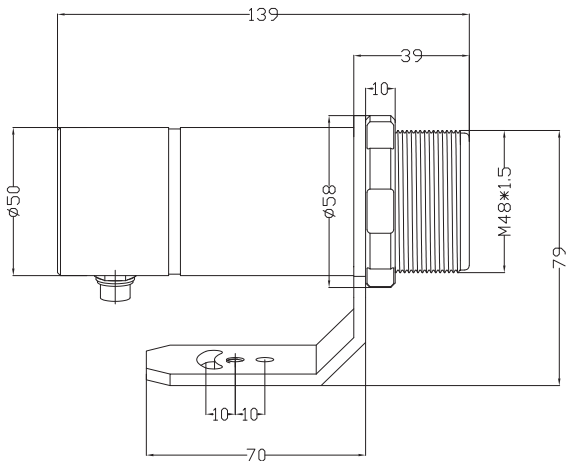
Sensor and Fixed Bracket



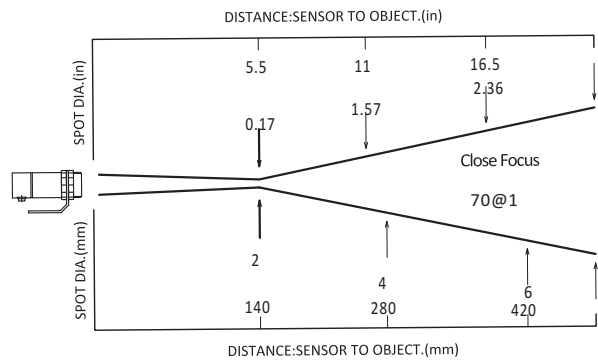
User Interface



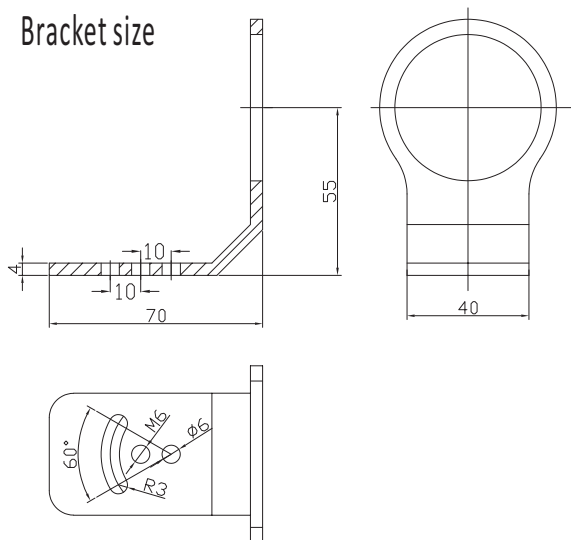
Dimension(mm)



Optical Specifications



Bracket size



NOTES: All dimensions are in millimeters.

Options

Options must be specified at time of purchase

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

Accessories

- RS232/422 converter serving for stand-alone or multiple sensors
- Protective Windows according to spectral range
- Cable extensions in different lengths
- Water/Air Cooling jacket for field retrofit as stainless steel or aluminium
- Extra rugged cast metal housing for thermal/mechanical environmental protection