

DIT-6 Two-color Infrared Thermometer Datasheet

DIT-6 Highlights

- Provide accurate measurement for targets which are: partially occluded; obstructed by smoke, dust, particulates; moving, smaller than the field of view of sensor.
- Measuring Range from 600^o to 3000^oC
- Fast response time less than 10 ms
- Suitable for long distance temperature measuring
- One-color or Two-color measurement Optional
- Simultaneous Analog and Digital outputs (RS485)
- Support up to 30 sets DIT series sensors on a multi-point network
- DIKAI V2.6 Multidrop Field Calibration Software

Dikai DIT Series infrared thermometer is two-color infrared temperature sensor, protected from dust and spray by a NEMA 4 (IP66) rated housing. This thermometer is ideally suitable for high temperature measurements and a good choice for molten metal, wire and rod forming, vacuum furnaces, induction heating and kiln applications.

DIT-6 Two-color thermometer features an advanced electro-optical design, digital electronics and built-in user interface, all combined in a rugged, compact housing. The DIT thermometer has through-the-lens optical sighting system, is very ideal for situations where the target may be obstructed by atmospheric smoke or other particulates, where the target is moving, or the target is smaller than the field-of-view. DIT-6 thermometer allows users to switch between one-color and two-color operation, which simplifies setup and provides continued measurement flexibility. The 4-digit LED display provides a convenient on-line indicator of the thermometer's operating status and easy operation of the parameters setting.

DIT-6 thermometer can be equipped with a compact, value-priced monitor that configures the functions via the front panel. It also includes optional bidirectional RS485 serial communications between the thermometer in factory and a computer in the control room. This enables remote set-up, monitoring and maintenance, especially valuable for installation in hard-to-reach locations.



Measurement Specifications:

Temperature Ranges:

DIT-6H1	600-1400 ^o C
DIT-6H2	800-1800 ^o C
DIT-6H3	1000-3000 ^o C

Detector	Si 0.4-1.1 μ m/Si 0.8-1.1 μ m
Accuracy	$\pm 0.75\%$ (FS)
Repeatability	$\pm 0.2\%$
Temperature Resoution	0.5 ^o C
Response Time	≤ 5 ms
Emissivity	0.10 to 1.00 (0.01) one-color
Slope	0.85 to 1.15 (0.01) two-color

Optical Specifications:

Typical Spot Size at Minimum Focus Distance

Models	D:S	Minimum Spot Size
DIT-6H1/H2/H3	280:1	2mm@560mm

Electrical Specifications:

Outputs

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

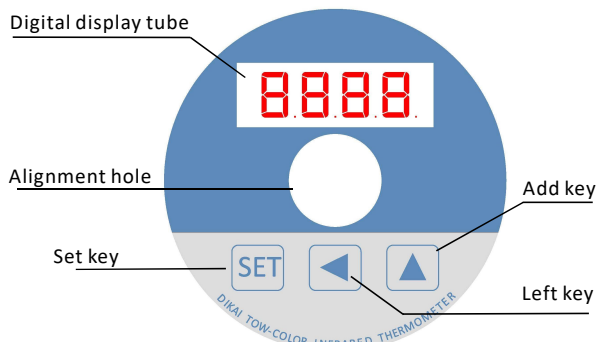
Power Supply	24VDC $\pm 20\%$ 500mA
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General Specifications:

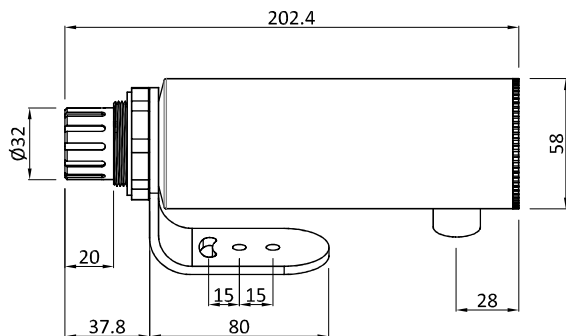
Environmenta Rating	IP65
Ambient Temperature	0-65 ^o C
Storage Temperature	-20-70 ^o C
Relative Humidity	10-95%, non-condensing
Anti Disturbance	JB/T9233.11-1999
Thermal Shock	GB/T2423.1,GB/t2423.2
Dimension	L:227mm,W: 61mm,H:61
Weight	550g

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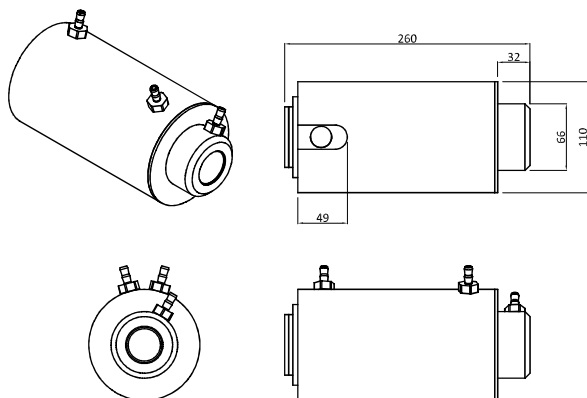
User Interface



Dimension :

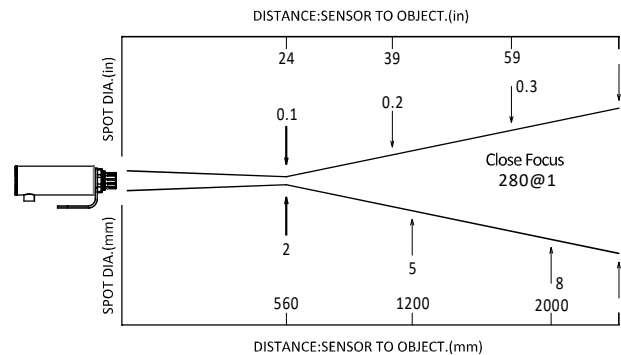


Water Cooled housing



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