

Non-Contact Infrared Temperature Sensor/Transmitter

Temperature Range: 0~400 °C

IR – 20-4W



Best Detectors, Best Service



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1. Features

IR-20 non-contact infrared thermometer measures the infrared wavelength emitted from the target spot and converts it to standard current signal output (4~20mA). It can measure from 0 °C to maximum 400 °C in the distance of 10:1 D:S (Distance to Spot)

Emissivity is 0.95 (fixed).

※Applications



Plastics, Fluids, Rubber, Coated components, Asphalt, Wood, Paper, Ceramics, Textiles, Glass, Food etc.

2. Ordering information

Code Number IR-20-4W-□-□-□

MODEL	Description
IR-20	
Code A	Temperature Range
1	0~200 °C
2	0~400 °C
Z	Other
Code B	Output
N	DC 4~20mA
V	Voltage Output(1~5V)
Z	Other
Code C	Cable Length
1	3M
Z	Other

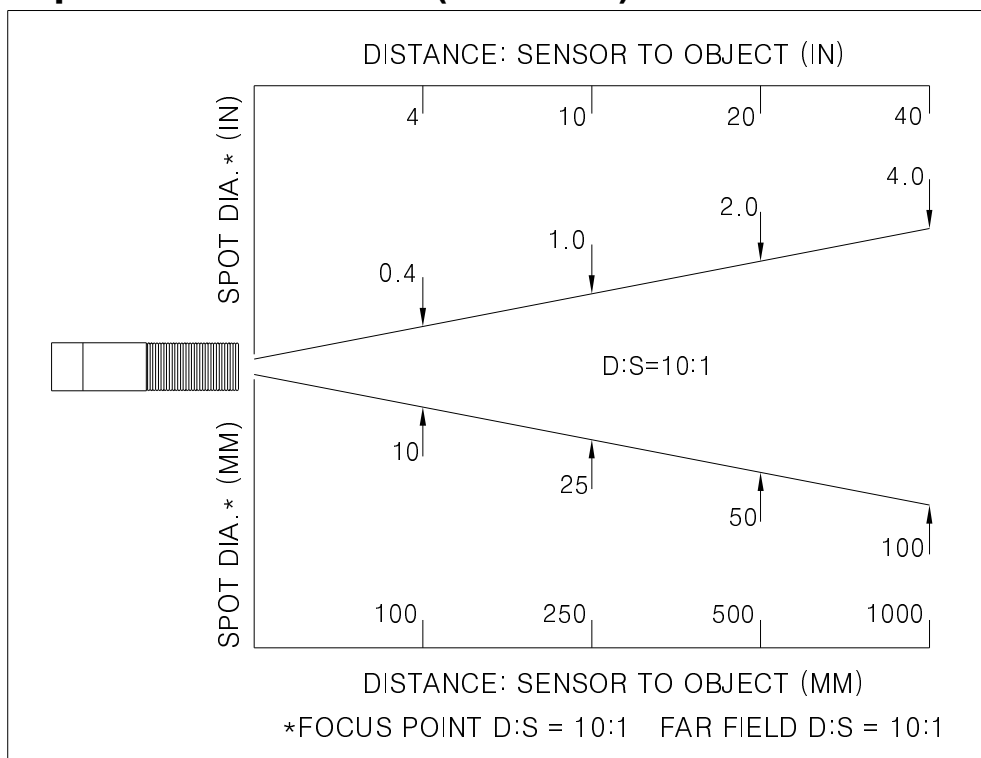
3. Accessories

Name	Shape	Usage	Remark
Fixing nut		Sensor fixing nut	Basic accessory
Mounting bracket		Sensor mounting bracket	Basic accessory

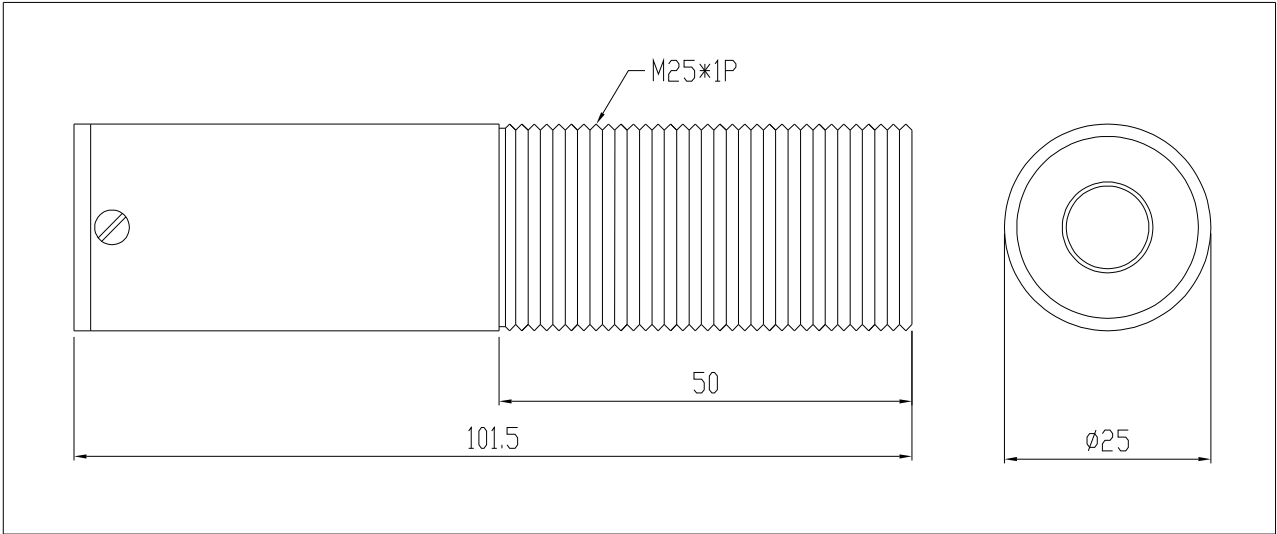
4. Specification

Segment	Specification
Measurement Range	0~400℃
Device	Thermopile
Accuracy	±1% / full scale
Repeatability	±1% of reading
Distance : Spot	10:1
Optical spectrum wave	8~14μm
Responsive Time	0.5 sec or below
Emissivity	0.95 fixed
Analog Output	4~20mA, 1~5V(option)
Power	DC 12~24V(Max 50mA)
Ambient temperature(no water cooling)	0~70℃
Temperature Resolution	0.1℃
Warm up Period	1 to 2 minutes
Operating Relative Humidity	5~90%
Operating Ambient Temperature	-30~85℃
Waterproof	IP65,NEMA 4
Dimensions	Ø36 × 110.5(L)
Signal Cable	4 wire shield type
Housing material	Aluminum Alloy
Weight	160g
Cable length	3m(standard), other(option)

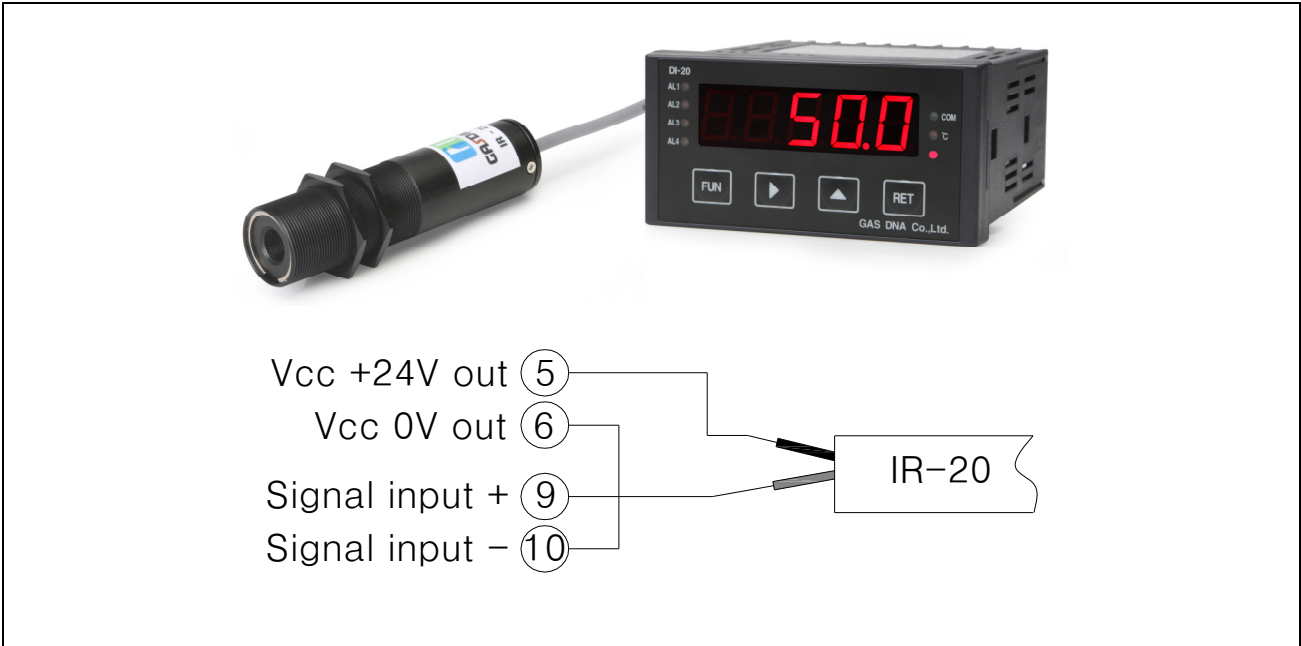
5. Optical field of view (D:S 10:1)



6. Dimension



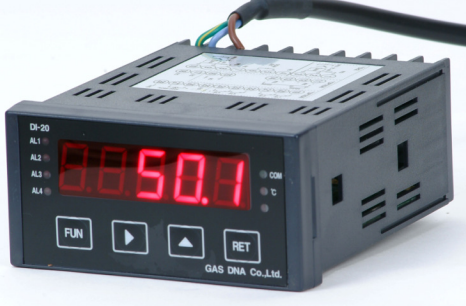



7. Wiring



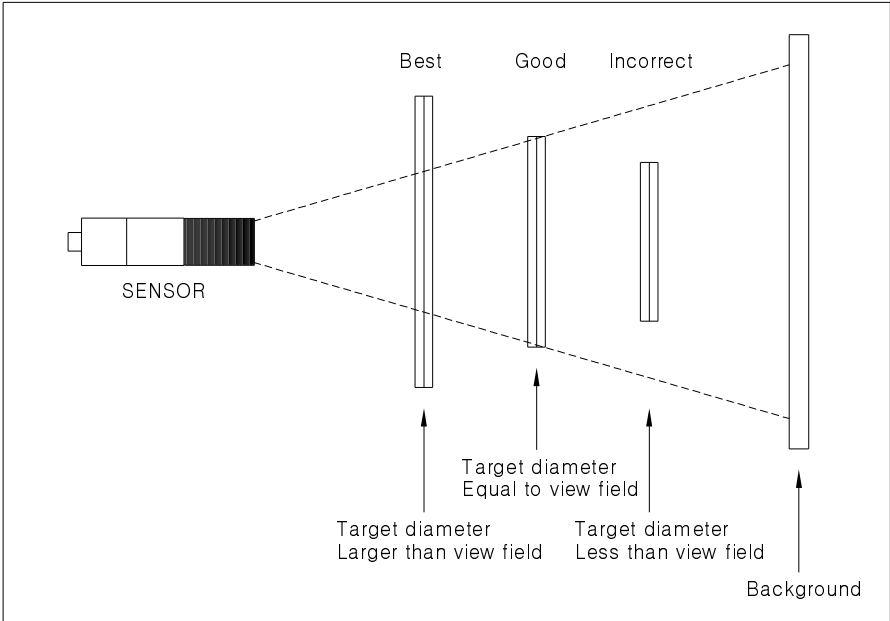
No.	Wire color	Usage
1	Red	Power 24VDC(+)
2	Black	Power signal output(4-20mA) +

8. Option

Name	Picture
Air-purge	 A black, cylindrical air-purge component with a threaded end and a blue cap.
Up and down adjustable Bracket	 A black, adjustable bracket with a circular cutout.
Indicator (Model No. DI-20)	 A black electronic indicator device (Model No. DI-20) with a red LED display showing '50.1'. It features buttons for 'FUN', 'RET', and navigation arrows, and is labeled 'GAS DNA CO., LTD.'.
2 Inch LED Display	 A 2-inch LED display with a red LED display showing '88.88.8'. It features buttons for 'RESET', 'MODE', 'UP', 'DOWN', and 'TEMP', and is labeled 'GAS DNA CO., LTD.'.

9. Installation

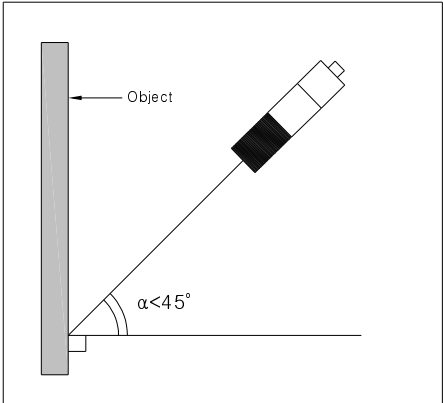
- Please make sure the target area is larger than the field of view.



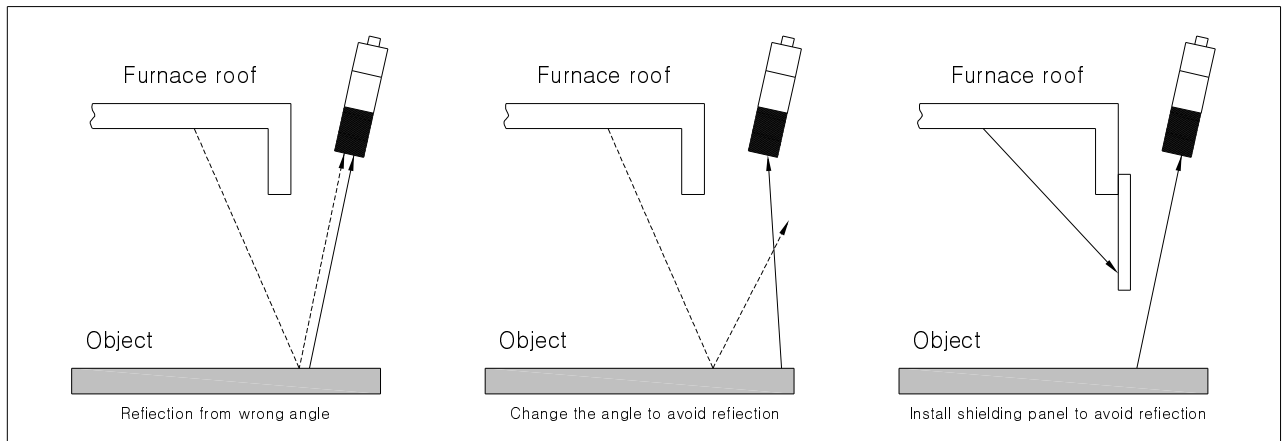
The spot size is decided by the distance from the sensor to the target. Please refer to the 'section 5. Optical field of view' and make sure your target area is larger than the field of view.

- Please locate the sensor vertical against the target area.

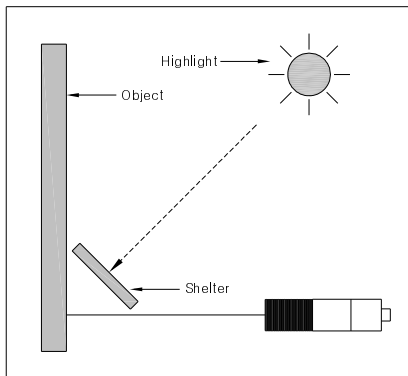
It is the best for you to install the sensor vertical against the target area or object. If it is not available, the sensor should be more than 45° against the target area. Otherwise, it can affect the measuring accuracy.



□ Please avoid the heat reflection from other high temperature materials



□ Please avoid high light.



□ Please avoid electronic noise.

Please avoid the high frequency or high voltage area such as motor, pump, power line, and so on.