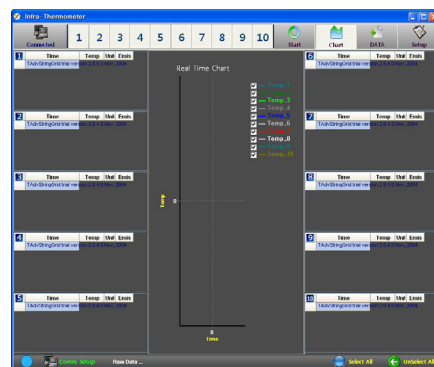


Non-Contact Infrared Temperature

IR - Compact

Sensor / Transmitter



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1. Features

IR-Compact 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 -60 °C to maximum 380°C in the distance of 8:1 D:S (Distance to Spot)

Emissivity is 0.10 ~ 0.99 adjustable.

IR-Compact can monitor the temperature in real time in site through its infrared sensor part and signal processing module.

● Applications



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

2. Ordering information

Code Number IR-compact- □ - □ - □

MODEL	Description
IR-COMPACT	
Code A	D:S
1	8:1
2	12:1 (Option)
Code B	Temperature Range
1	-60~380 °C
2	0~200 °C
Z	Other
Code C	OutPut
N	4~20mA
Code D	Cable Length
1	1m Cable
Z	Other (Option)

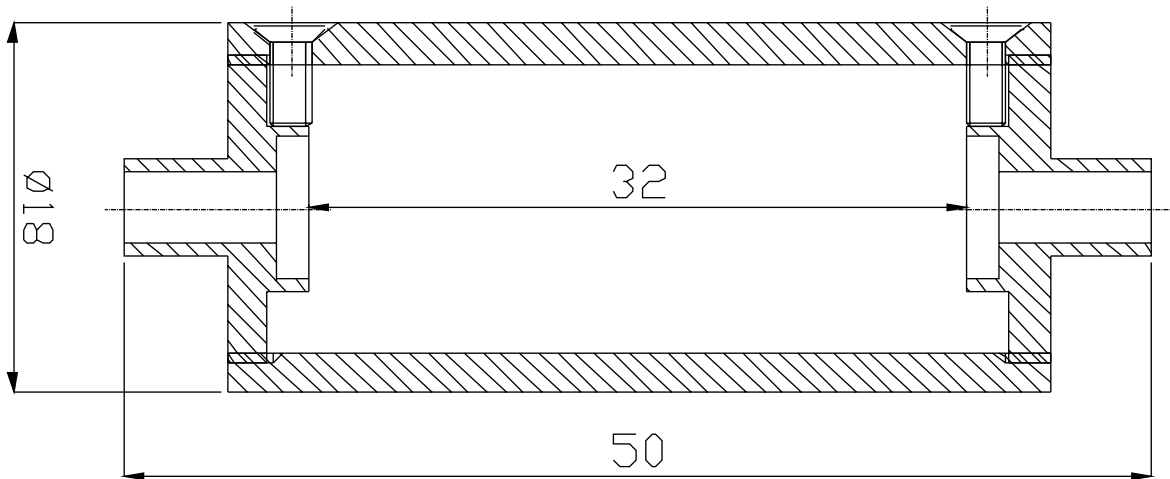
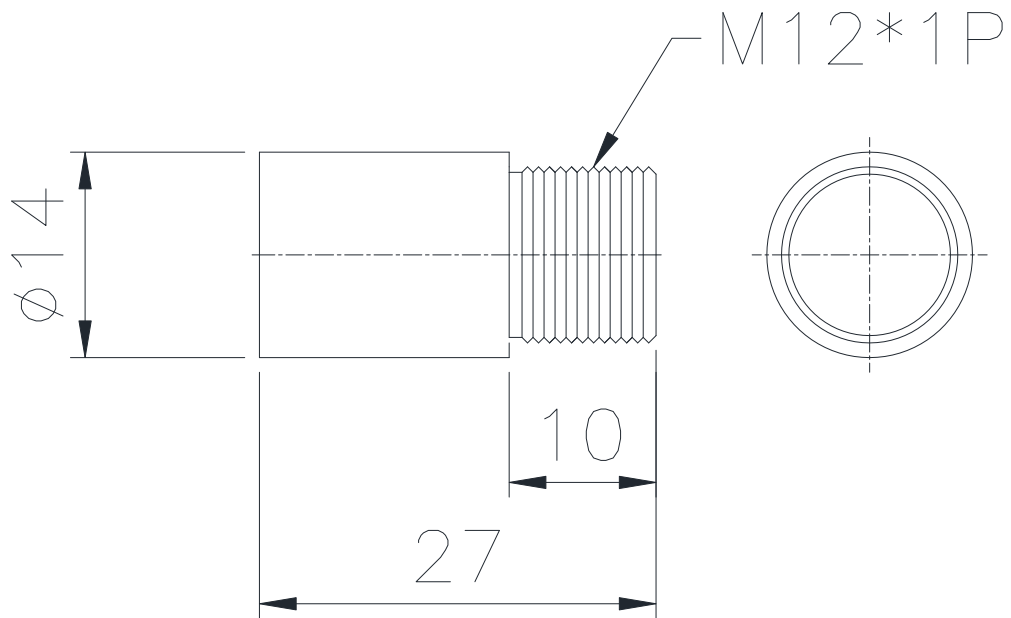
3. Accessories

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

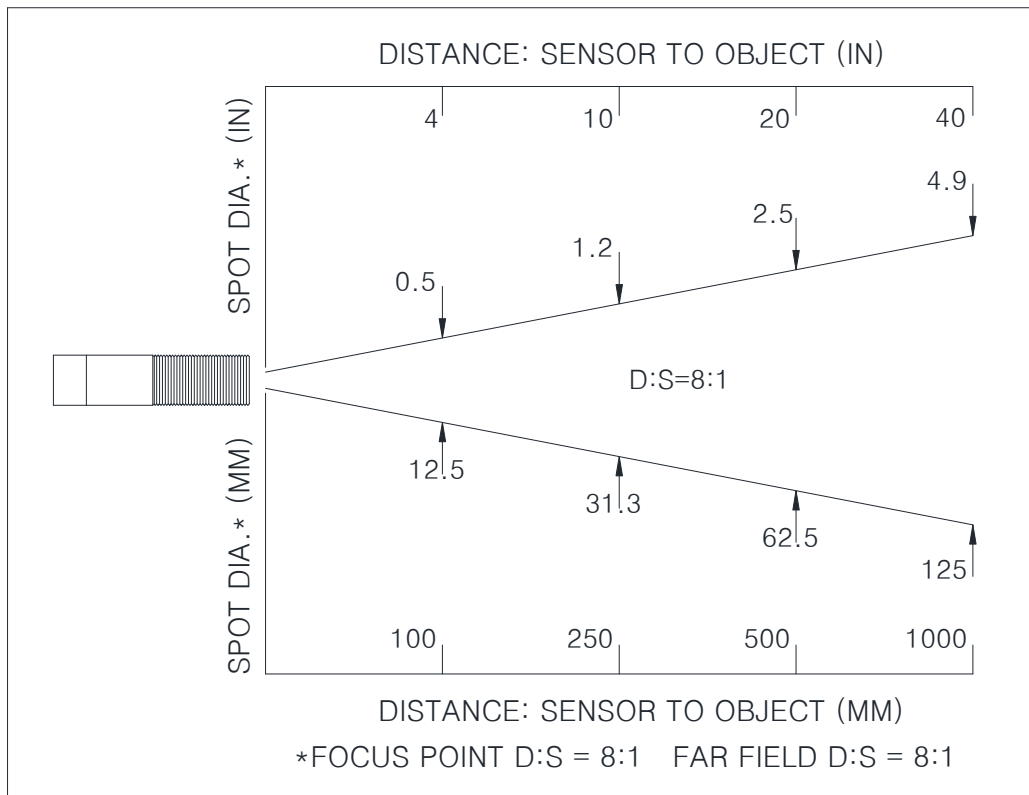
4. Specification

Segment	Specification
Measurement Range	-60~380℃
Device	Thermopile
Accuracy	±1% / full scale
Repeatability	±1% of reading
Distance : Spot	8:1
Optical spectrum wave	8~14 μ m
Responsive Time	0.5 sec or below
Emissivity	0.10~0.99
Analog Output	4~20mA
Communication	RS-485
Power	DC 12~24V(Max 100mA)
Ambient temperature(no water cooling)	0~70℃
Temperature Resolution	0.1℃
Operating Relative Humidity	5~90%
Operating Ambient Temperature	-30~85℃
Waterproof	IP65,NEMA 4
Housing material	SUS
Weight	285g
Cable length	1m (standard), other(option)





5. Dimension



6. Optical field of view (D:S 8:1)



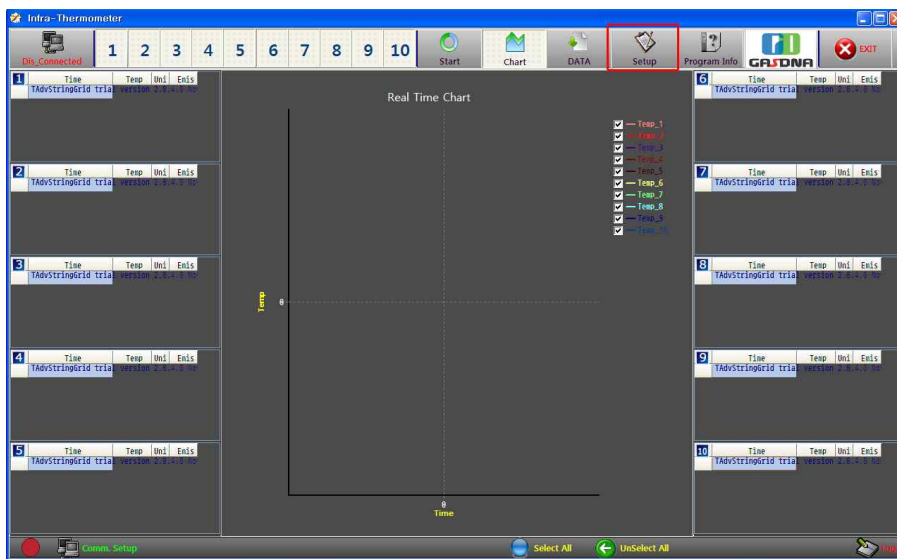
7. Option

			
485 To RS232 converter	Up and down adjustable Bracket	Indicator (Model No. DI-20)	2 Inch Led Display

8. Wiring

No.	Cable color	Usage
1	Black	Power 24VDC(+)
2	Red	Power 0V(-)
3	Yellow	mA (Current) Analog output
4	Green	TX+
5	White	TX-

9. Communication specification and Software

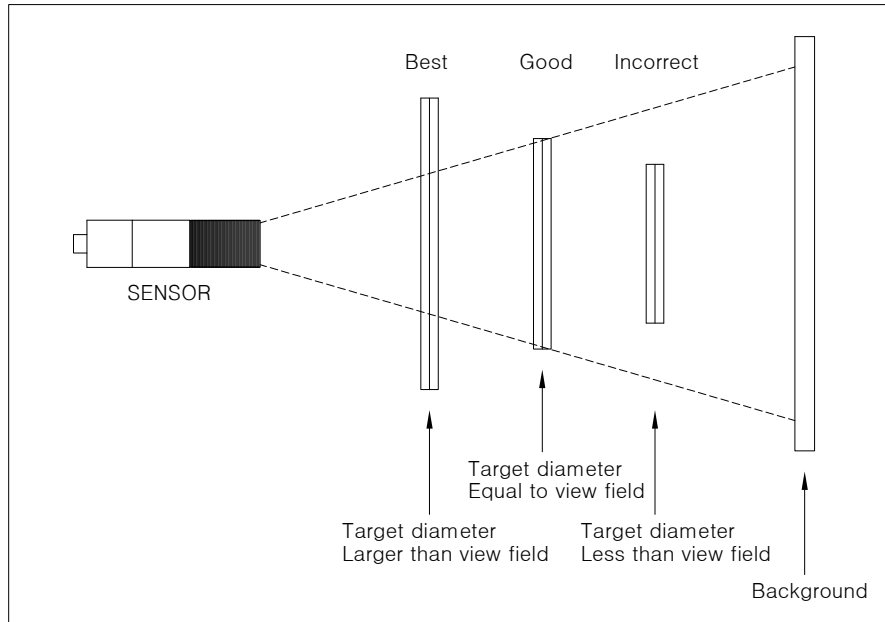


10. Emissivity Table

Material	Emissivity
Black body	0.95
Asphalt	0.90~0.98
Textiles, Fabric	0.98
Concrete	0.94
Ascon	0.95
Skin	0.98
Leather	0.75
Sand	0.90
Soil	0.92~0.96
Paint	0.8~0.95
Water	0.92~0.96
Ice	0.96~0.98
Rubber	0.94
Snow	0.83
Plastic	0.85~0.95
Wood	0.90
Ceramic	0.90~0.94
Glass	0.90~0.94
Marble	0.94
Chromic Oxide	0.78
Iron Oxide	0.78~0.82
Brick	0.93~0.96
Copper oxide	0.78
Mortar	0.89~0.91

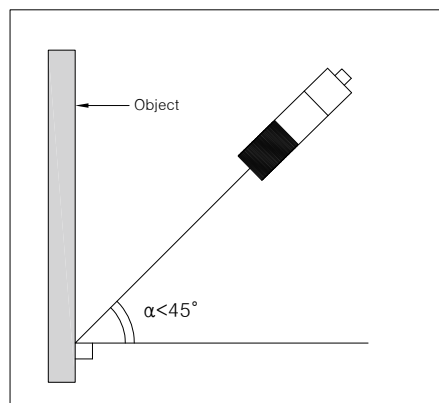
11. Installation

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



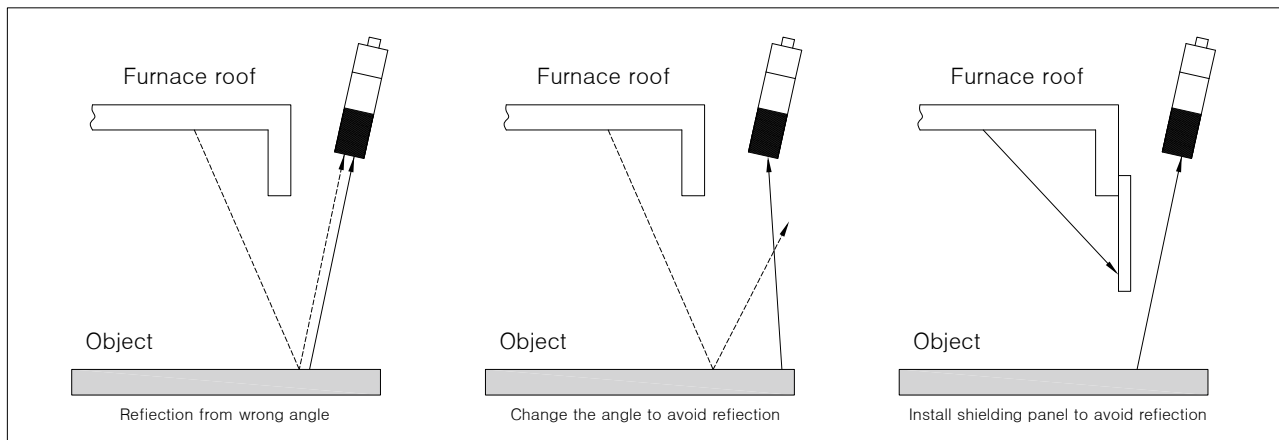
- The spot size is decided by the distance from the sensor to the target.
- Please refer to the 'section 5. Optical field of view' and make sure your target area is larger than the field of view.

- Please locate the sensor vertical against the target.

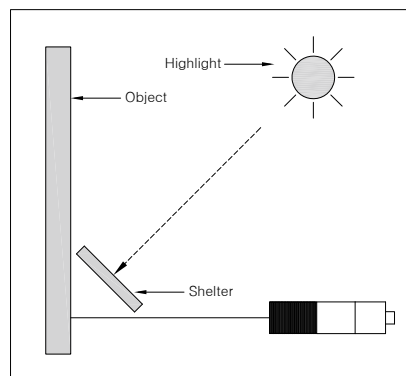


- It is the best for you to install the sensor vertical against the target area or object. If it is not available, the sensor should be more than 45° against the target area. Otherwise, it can affect the measuring accuracy.

- Please avoid the heat reflection from other high temperature materials



- Please avoid highlight.



- Please avoid electronic noise.

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