

INFRARED TEMPERATURE TRANSMITTER

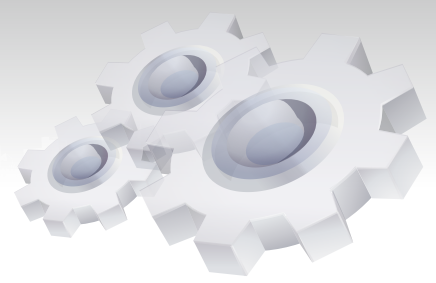
■ Features

- Accuracy : $\pm 2\%$
- Combine infrared component, sensor, optical system and circuit in the housing
- Stainless steel material, easily installation
- Multi accessories available for different application



Specifications

Model Name	MCT-S
Accuracy	Reading output $\pm 2\%$, by max. value (Temp.: $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
Repeatability	Reading output $\pm 1\%$, by max. value (Temp.: $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
Optical Measuring Range	8~14 μm
Temperature Range	0~500 $^{\circ}\text{C}$
Response Time	300ms(95%)
Emissivity	0.95 fixed (custom design for special measuring meters)
Field to View	15:1
Operating Temperature	0~60 $^{\circ}\text{C}$
Storage Temperature	-20~80 $^{\circ}\text{C}$
Humidity Range	10~95%(non-condensing)
Power Supply	24VDC
Max. Current	50mA
Analog Output	4~20mA _{dc} linear
Housing Material/Dimensions	Stainless steel /118mm x Φ 18mm (lengthxdiameter)
Wire Length	1m(standard)
Degree of protection	IP65



■ INSTALLATION & DISTANCE :

High accuracy optical lens and focus design, the measuring light spot diameter is

13mm when the distance is with 100mm.

The light spot size will be zoomed out while the measuring distance is increased.

EX: The light spot is 80mm when the distance is 1.2M. The ratio of measuring distance

& light spot is named "Emissivity".

The emissivity of MCT-S is 15:1

■ GENERAL EMISSIVITY TABLE :

Material			Emissivity	Material		Emissivity
Metal	Aluminum	Polishing	0.04-0.06	Non-Metal	Asbestos	0.95
		Polishing Oxidation	0.55		Asphalt	0.95
		Oxidation	0.11-0.25		Paper	0.70-0.90
	Brass	Polishing	0.02-0.05		Concrete	0.92
		Non-Oxidation	0.20		Water	0.95
		Oxidation	0.0-0.88		Plaster	0.80-0.90
	Steel	Polishing	0.10		Skin	0.98
		Flat	0.40-0.60		Carbon	0.95
	Tungsten		0.05		Paint	0.80-0.98
	Nickel	Electro Polished	0.05		Soil	0.90-0.98
		Non Electro Polished	0.11		Rubber	0.95
		Oxidation	0.30-0.50		Porcelian	0.93
	Lead	Polishing	0.05-0.07		Wood	0.93
		Coarse	0.40		Ice	0.98
		Oxidation	0.30-0.60		Fiberboard	0.95
	Zinc	Non-Oxidation	0.05		Lamp Black	0.96
		Galvanized Iron	0.25		Sand	0.96