

# Compact, On-Line IR Thermometer/Pyrometer for Low Temperature Applications

## 0°C to 500°C

TL-8

**TL-8** is a rugged and compact IR Pyrometer of class T series especially designed for low temperature application needs, ranging from 0°C...500°C. The highly recommended and OEM favourite model is perfectly suited for demanding industrial environment because of the compact size, small housing dimensions, and low maintenance.

**TL-8** model of T series is particularly a tough competitor due to its high performance at very attractive economy range. **TL-8** model can replace the already installed contact probes with the K type or J type thermocouple output along with standard 0..5V, 4...20mA analog outputs **TL-8** IR pyrometer comes along with digital TTL Output and Alarm Output for variety of applications in process industries.



### Technical specifications

Model	TL-8
Temperature Range (Analog sub-range adjustable)	0°C to 500°C
Spectral Range	8 - 14 μm
Photodetector Type	Thermopile
Distance to Spot Size Ratio	15:1
Emissivity (ε)	0.1 to 1.2 adjustable
Response Time	100 msec adjustable upto 10 sec
Accuracy	± 2% of measured value or ± 3°C whichever is greater (Stabilization time is 15min)
Repeatability	± 0.5% of measured value or ± 1°C whichever is greater
Analog Output	0 - 5V, 4 - 20mA, J type or K Type Thermocouple Output(Select any one analog output while ordering)
Digital Output	TTL Output
Alarm Output	24 V DC, Load < 100mA(Transistor)
Operating Temp. Range	0°C.....70°C
Storage Temp. Range	-20°C...70°C
Adjustable Parameters and Features via Software	Emissivity, Response Time, *Analog Scale( Sub Range) , Unit Of Temperature(°C/°F),Alarm Set point, Clear time(Peak Picker) etc *Not applicable for J and K type
Power Supply	24 V DC, I < 50 mA
Power Consumption	Max 1.2 watt
Protection Class	IP65
Housing	Stainless Steel
Operating Humidity	10-95%, Non-Condensing Conditions
Weight & Dimensions	200g Dia= Ø25mm; L=103mm



TL-8 is provided with TTL output. Using the USB interface *Infralink* and Software pyrometer can be connected to PC for parameter setting and data logging.

### Features

- Temperature range from 0°C to 500°C
- 15:1 optics
- Spectral range 8...14 μm
- 100 ms response time adjustable upto 10 sec
- Analog output options like 0 – 5 V, 4...20mA, Thermocouple output like K type or Jtype.
- Alarm output
- TTL Output
- Infralink USB Interface to access the Infrasoftware

### Standard Scope of Supply

- Pyrometer with 3 mtr. long connection cable
- TTL output
- Alarm output
- Analog output 0 - 5V, 4...20mA, K or J type thermocouple output(Select any one while ordering)
- Calibration certificate, Software & Operation Manual.

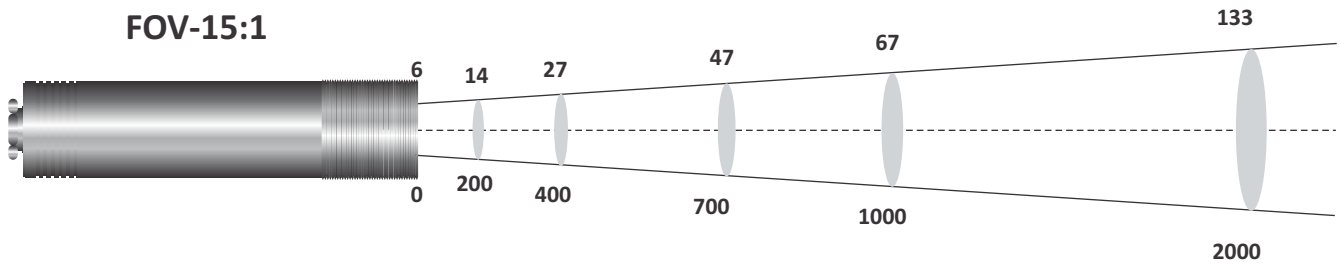
### Optional

- Extra cable lengths
- Mechanical and Electrical Accessories
- USB Interface card

### Applications

- Plastic
- Paper
- Fluids
- Rubber
- Ceramic
- Wood
- Glass
- Painted & Oxidized Surface
- Textiles

## Spot Sizes

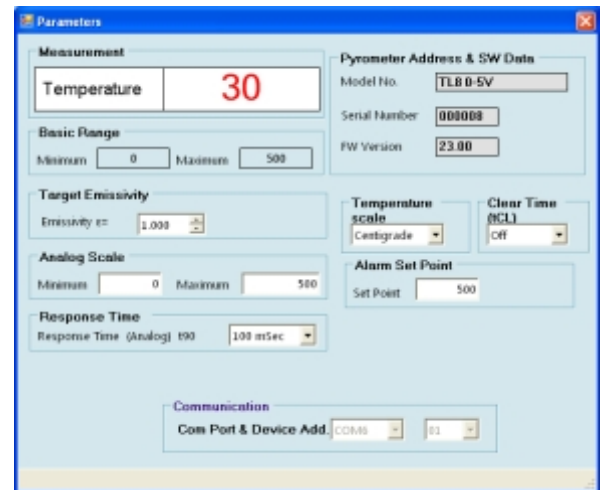


## Software "MT500"

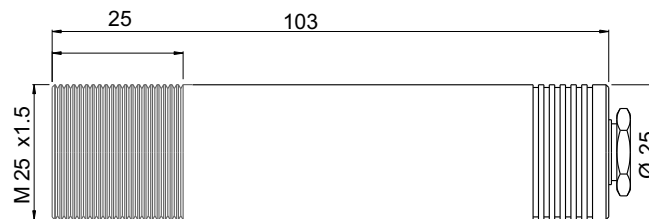
AST "MT500" software is under standard scope of supply. It offers Communication between the pyrometer and the software is implemented via USB Interface card. It comes with alarm set point, Clear time (tCL), Parameter settings features.

Some of the parameters adjustable via software are





- Emissivity
- Response Time
- Clear Time(Peak Picker)
- Alarm Set Point
- Analog Sub Range (not applicable for J & K type Thermocouple)
- Unit Of Temperature(°C/°F)



## Pyrometer Drawing



## Accessories

Air purge unit Reference No. 8200 - 01	Adjustable Mounting Reference No. 8200 - 03	Power Supply Unit (Reference no: 9000-02)	Temperature Indicator (Reference no: 9000-01)
			



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