

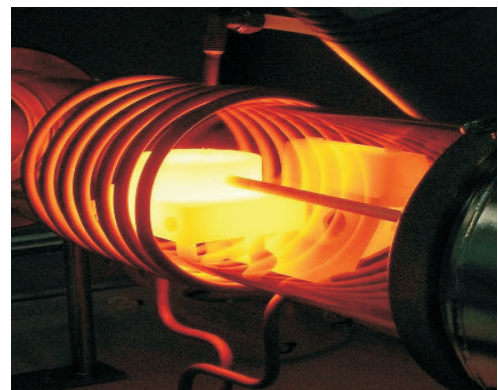
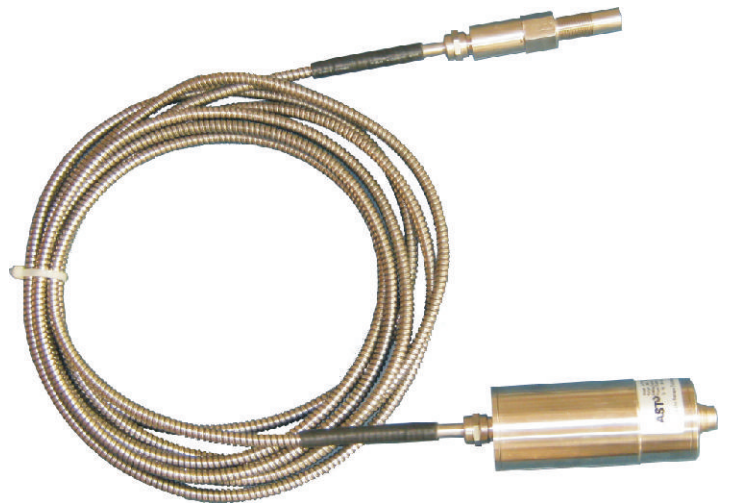
## AST 450 FO

On line Infrared Non-contact two color  
Pyrometer with fibre optic cable

CE 600.... 3200°C

AST 450 FO is specially designed high accurate digital pyrometer with fiber optic cable which provides high performance and low maintenance. Parameters like, emissivity, response time, analog output sub-range are adjustable through the software supplied. They are specially designed for applications under rough condition. These can be used in areas with high ambient temperatures (up to 250°C) without cooling or in areas where strong electromagnetic interference can influence a correct measurement because the fiber and optical head do not contain electronics part.

The rugged fiber optic cable is designed to withstand high ambient temperature 250°C in the Industrial application without water cooling .The pyrometers have solid body in Stainless Steel housing which provide high operation safety even in rough industrial environment.



- ❖ Highly accurate 0.5% of the measured value +1°C
- ❖ Wide temperature range 600....3200°C
- ❖ Fully digital. Analog and digital output
- ❖ High optical resolution
- ❖ Fast response time : 20mS Adjustable upto10S
- ❖ Very good stability
- ❖ User friendly software
- ❖ Rugged Stainless Steel Housing

### Applications

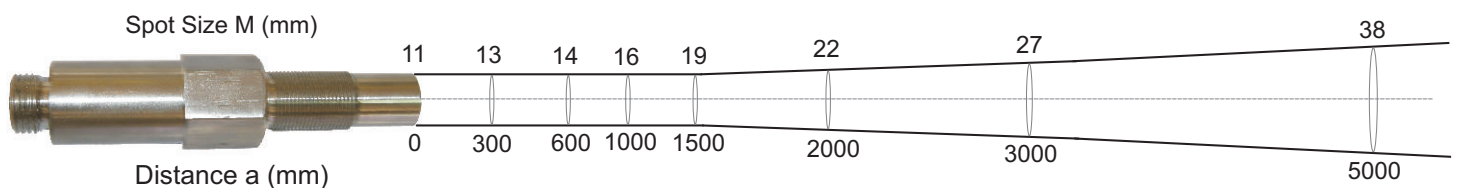
Induction heating  
Annealing  
Welding  
Forging  
Sintering  
Melting  
Rolling mills  
Rotary kilns  
Crystal growing

*We Measure Temperature Accurately  
even in extreme Conditions*

# TECHNICAL SPECIFICATION

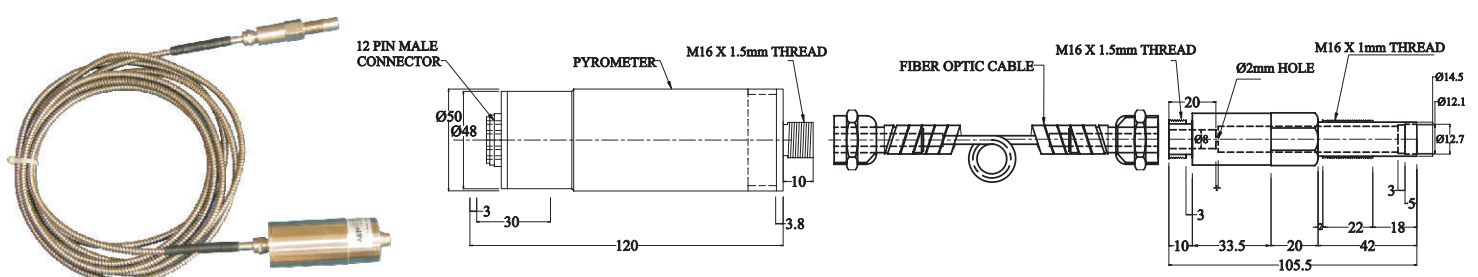
<b>Model</b>	<b>AST 450 FO</b>
Measured Temperatures Range	600°.....1800 °C 750°.....3200 °C     Analog output sub range adjustable
Emissivity Range	0.1.....1 adjustable
Spectral Range, $\mu\text{m}$	0.7.....1.15 $\mu\text{m}$
Photodetector Type	Si
Response Time	20msec. Adjustable upto 10S
Accuracy & Repeatability	+/-0.5% of the measured value +1°C
Analog Output	4-20mA or 0-20mA or 0-10V user selectable
Digital Output	Serial communication : RS 232 or RS 485 Isolated
Power	24 V DC
Optical Resolution	Distance 1mtr, spot size 16mm
Operating temperature range at fibre	Max.250°C
Operating temperature range	0°C +70°C at pyrometer end
Fibre Optic	5 mtr long multi fibre in SS flexible conduit
Isolation	Power supply and digital output and analog output are galvanically isolated against each other
Operating humidity	Unlimited
Dimensions/Weight (without FOC)	Ø50mm; L=118mm;/0.6kg
Adjustable Parameters via software	Response time, Peak picker, Average , Analog output sub range, emissivity, interval of data storage
Readable parameters via software	Measured temperature, temperature graph, Pyrometer internal temperature, brightness temperature,

## Optical Resolution

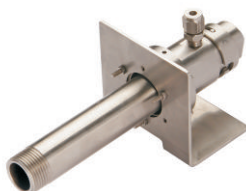


## Dimensions

Pyrometer with Fibre optic cable & optical head



# ACCESSORIES



**Air purge unit with sighting tube**  
Reference No. 8100 - 01



**Air purge unit with Ceramic tube**  
Reference No. 8100 - 02



**Air purge with Mounting flange**  
Reference No. 8100 - 03



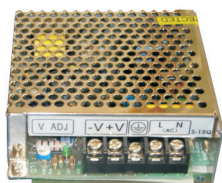
**Fiber Optic Cable**  
Reference No. 6000 - 01 (5 Mtr)  
Reference No. 6000 - 02 (10 Mtr)



**Display with Parameterizer (P-120)**  
Reference No. 9001 - 01



**Converter, RS 485 to RS 232**  
Reference No. 9000 - 03



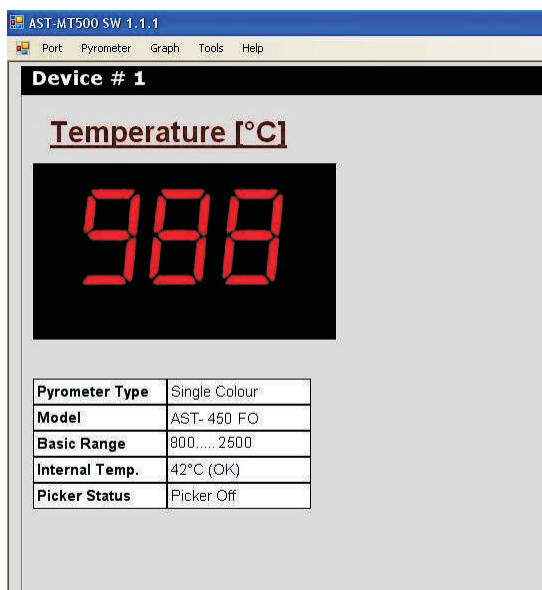
**Power supply Input 110 / 230 V AC,  
Output 24 V DC, 0.75Amp**  
Reference No. 9000 - 02



**Temperature Indicator with retransmission  
output 4.20mA**  
Reference No. 9000 - 01

## Software MT 500

- ❖ Emissivity setting
- ❖ Response time setting
- ❖ Peak picker setting
- ❖ Average temperature setting
- ❖ Valley
- ❖ Graphs
- ❖ Data logging



**TEMPESENS INSTRUMENTS (I) PVT. LTD.**

B-188 A, Road No.-5, MIA, Madri, Udaipur Rajasthan

Ph. : +91-294-3057700, Fax : +91-294-3057750

E-mail : [info@tempsens.com](mailto:info@tempsens.com)

Website : [www.tempsens.com](http://www.tempsens.com)

**TEMPESENS**  
INSTRUMENTS