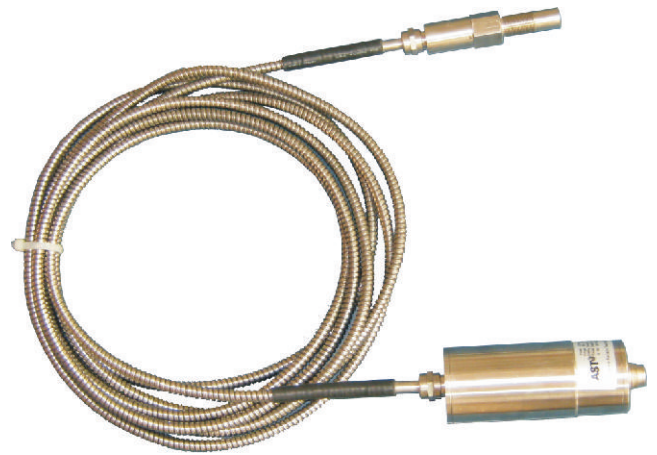


AST 450C FO

On line Infrared Non- Contact Two Colour
Pyrometer With fibre optic cable
CE 800.....2500° C

AST 450C FO is specially designed high accurate digital two colour pyrometer with fiber optic cable which provides high performance and low maintenance. This device measures the temperature of an object by calculating the ratio of the energies at two different wavelength bands. Temperature measurement is not effected by parameter's affects the amount of energy reaching to pyrometer. This makes a ratio thermometer inherently more accurate. The ratio technique may eliminate, or reduce, error in temperature measurement caused by changes in emissivity, surface finish, and energy absorbing materials, such as water vapor, between the pyrometer and the target. The pyrometer can be used in both ratio and single color mode. Parameters like, emissivity ratio, emissivity, response time, analog output sub-range are adjustable through the software supplied.

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**
- ★ **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**
- ★ **Variety of accessories**

Applications

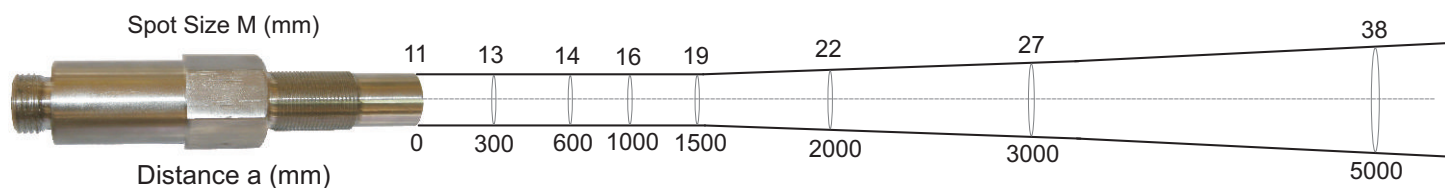
- Induction heating
- Annealing
- Welding
- Forging
- Sintering
- Melting
- Rolling mills Rotary kilns
- Crystal growing

*We Measure Temperature Accurately
even in extreme Conditions*

TECHNICAL SPECIFICATION

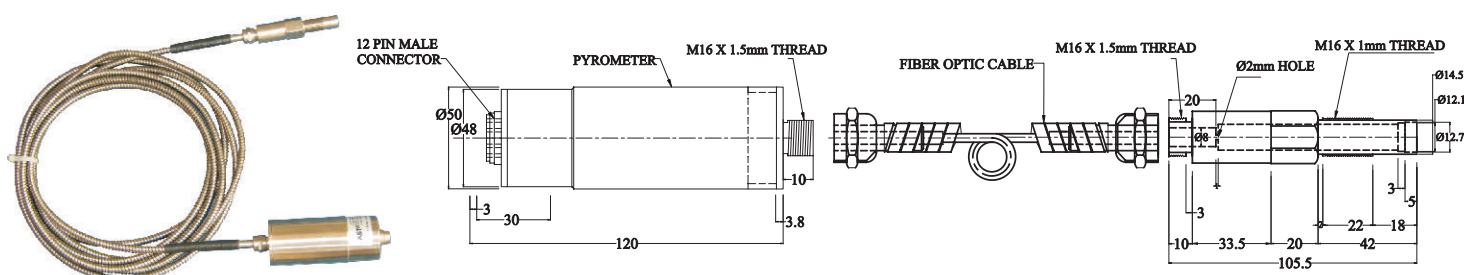
Model	AST 450C FO
Measured Temperatures Range	800°2500°C (Analog output sub range adjustable)
Emissivity Setting	0.1.....1 adjustable (Single color measurement)
Emissivity Slop Setting	0.75.....1.25 adjustable (Two color measurement)
Spectral Range, μm	0.75....1.25 μm
Photodetector Type	Si/Si
Response 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 & optical head	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 (Electronic unit)	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, Internal temperature, brightness temperature,

Optical Resolution

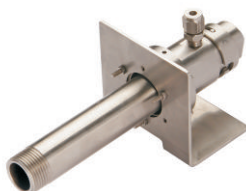


Dimensions

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



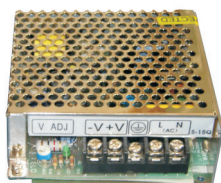
Fiber Optic Cable
Reference No. 6000 - 01 (5 Mtr)
Reference No. 6000 - 02 (10 Mtr)



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

The screenshot shows the software interface for 'Device # 1'. The main display shows 'Temperature [°C]' with a large red digital readout of '869'. To the right is a vertical green bar representing 'Energy' from 0% to 100%, with a '20% S.W Limit' marker. Below the display is a table with the following data:

Pyrometer Type	Two Colour
Model	AST-450C FO
Basic Range	800...2500
Internal Temp.	38°C (OK)
Picker Status	Picker Off

TEMPSSENS 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

Website : www.tempsens.com

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