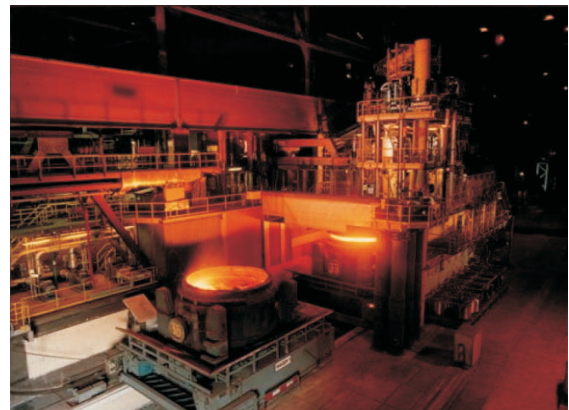


AST 450C FO/PL

Digital pyrometer in two color with mono fiber optic cable

CE 800-3200°C

AST 450C FO/PL are highly accurate digital two colour pyrometers with fiber optic for non contact temperature measurement. 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 sensor head do not contain electronics part. Temperature measurement is not effected by any parameter which affects the amount of energy reaching 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 main parameters such as emissivity and response time can be set. These parameter as well as the additional parameters such as analog output sub range, peak picker and address can be adjusted via PC.



- ❖ **Highly accurate 0.5 % of measured value +1°C**
- ❖ **Wide temperature range**
- ❖ **Analog and Digital output**
- ❖ **Two color, single color switchable**
- ❖ **High Optical Resolution**
- ❖ **Laser targeting light**
- ❖ **Small Spot sizes**
- ❖ **Analog output 0...20mA or 4...20mA or 0-10 V**
- ❖ **Digital interference RS 232 or RS 485**
- ❖ **Fiber optics and optical head withstand up to 250°C**
- ❖ **Rugged mono fiber optics**



Applications

Induction heating
Welding
Casting
Forging
Annealing
Sintering
Rolling mill
Rotary kilns
Pouring stream

*We Measure Temperature Accurately
even in extreme Conditions*

TECHNICAL SPECIFICATION

Model	450C FO/PL
Measured Temperatures Range (Analog output sub range adjustable)	800 °C - 2500 °C 1000°C - 3200°C
Emissivity Range Emissivity Slope	0.1.....1.0 adjustable (For single color measurement) 0.75.....1.25 slope adjustable (For Two color measurement)
Spectral Range, μm	0.7.....1.15μm
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 0-10 V user selectable
Digital Output	Serial communication : RS 232 Isolated, RS485
Power	24 V DC
Operating temperature range at fiber	Max.250°C at fiber optics cable,0....70°C at pyrometer end
Fiber Optic	2.5 meter standard (available 5,10,15 meter on request)
Sighting	Laser pilot light
Isolation	Power supply and digital output and analog output are galvanically isolated against each other
Operating humidity	Unlimited
Housing	Stainless steel, IP65 Ø50mm; L=118mm;/0.6kg
Adjustable Parameters via software	Emissivity, Emissivity slope, Analog output, Response time, Peak picker, Average, Analog output sub range, Switches between two color & single color
Readable parameters via software	Measured temperature, temperature graph, Pyrometer internal temperature, Brightness Temperature

		800 - 2500°C	1000 - 3200°C
Optical Head	Working Distance (mm)	Spot Size(mm)	Spot Size(mm)
 Optical Head - I	120	3	1.2
	260	6.5	2.6
	700	17.5	7
 Optical Head - II	90	1.2	0.5
	200	2.5	1
	600	7.5	3
	4500	57	28

ACCESSORIES



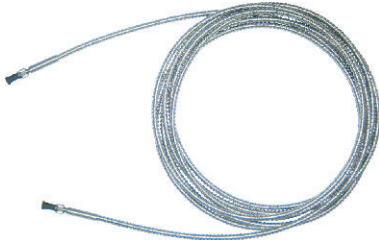
Water Cooling Jacket & Air purge unit
for optical head II
Reference No. 8000 - 01



Air purge unit
for optical head II
Reference No. 8200 - 01



Adjustable Mounting
for optical head II
Reference No. 8200 - 03



Fiber Optic Cable
Reference No. 5000 - 01 (2.5 Mtr)



Air purge unit for optical head-I
Reference No. 8200 - 02



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



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



Temperature Indicator with
retransmission output 4..20mA
Reference No. 9000 - 01



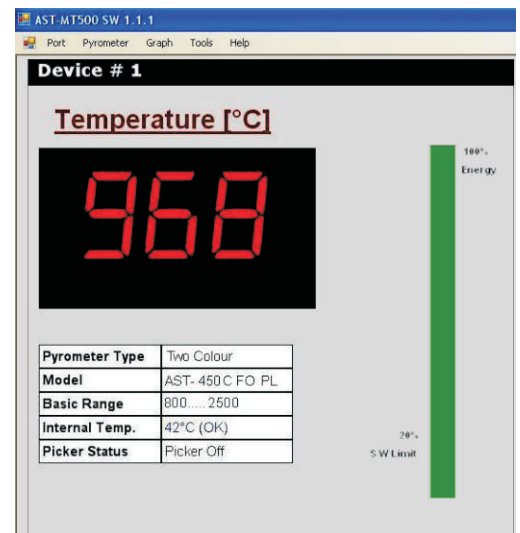
Converter Rs485 RS232
Reference No. 9000-03



Adjustable mounting for optical head-I

Software MT 500

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



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