

## Digital pyrometer with mono fiber optic cable CE 250°C to 2500°C

AST A250 FO/PL & AST A450 FO/PL are highly accurate digital 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 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. With the very short response time of <2ms the pyrometer can even measure fastest heating processes. 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.

AST A250/A450 FO-PL is provided with USB 2.0 connector with cable. The pyrometer can be powered through USB port. In this case no external power supply is required (+24V DC requires for operation of analog output, laser, RS-232 / RS-485 output )

### Applications

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

## AST A250/A450 FO-PL



### Standard Scope of Supply

AST A250 / A450 FO-PL with Laser Targeting Light , USB Output, 2.5 M Long fiber optic Cable, USB Cable, 5M long Connection Cable.

### Features

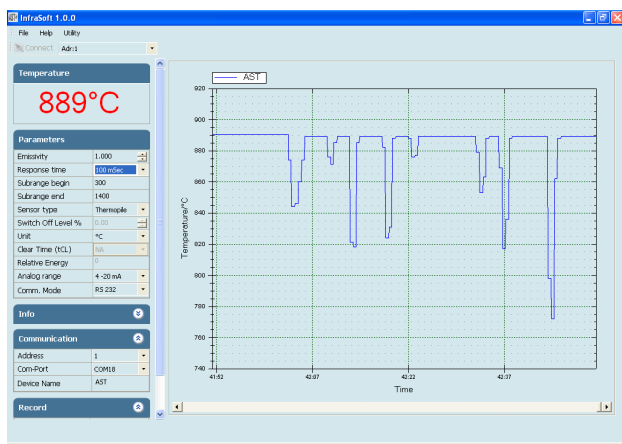
- Highly accurate 0.3 % of measured value + 1°C
- Wide temperature range
- Analog and Digital output
- High Optical Resolution
- Laser targeting light
- USB Output
- Small Spot sizes
- Analog output 0...20mA or 4...20mA or 0-10 V
- Digital interference RS 232 or RS 485
- Peak Picker
- Fiber optics and optical head withstand up to 250°C
- Rugged mono fiber optics





*We Measure Temperature Accurately even in extreme conditions*

Model	AST A250 FO/PL	AST A450 FO/PL
Measured Temperatures Range (Analog sub range adjustable)	250°C - 1300°C 300 °C - 1800 °C	600°C -1900°C 750 °C -2500°C
Emissivity Range	0.1.....1.0 adjustable	
Spectral Range, $\mu\text{m}$	1.6 $\mu\text{m}$	1 $\mu\text{m}$
Photodetector Type	InGaAs	Si
Response Time	2msec. Adjustable upto 10S	
Accuracy	+/- 0.3% of the measured value + 1°C	
Repeatability	+/- 0.1% of the measured value + 1°C	
Analog Output	4 - 20mA or 0 - 20mA or 0 -10 V user selectable	
Digital Output	USB 2.0, RS-232 or RS-485 (Isolated) User Selectable	
Power	24 V DC	
Operating temperature range at fiber	Max.250°C at fiber optics cable and optical head, 0....70°C at pyrometer end	
Fiber Optic	2.5meter standard (available 5, 10, 15, 20 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 Ø49.5 mm; L=118mm;/0.6kg	
Adjustable Parameters via software	Response time, Peak picker, Average, Analog output sub range, emissivity, interval of data storage.	

## Software “Infrasoft”



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

Optical Head	Working Distance (mm)	AST A250 FO/PL	AST A250 FO/PL	AST A450 FO/PL
		Spot Size(mm) 250°C - 1300°C	Spot Size(mm) 300°C - 1800°C	Spot Size(mm) 600°C - 1900°C 750°C - 2500°C
 Optical Head - I	120	3	1.2	1.2
	260	6.5	2.6	2.6
	700	17.5	7.0	7.0
 Optical Head - II	90	1.2	0.5	0.5
	200	2.5	1	1
	600	7.5	3	3
	4500	57	23	23

## Accessories

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



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



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



Adjustable mounting for optical head-I  
Reference No. 8200 - 04



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

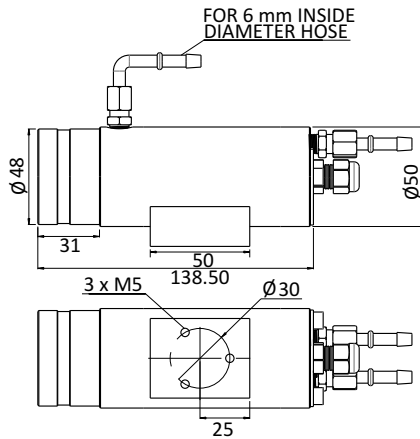
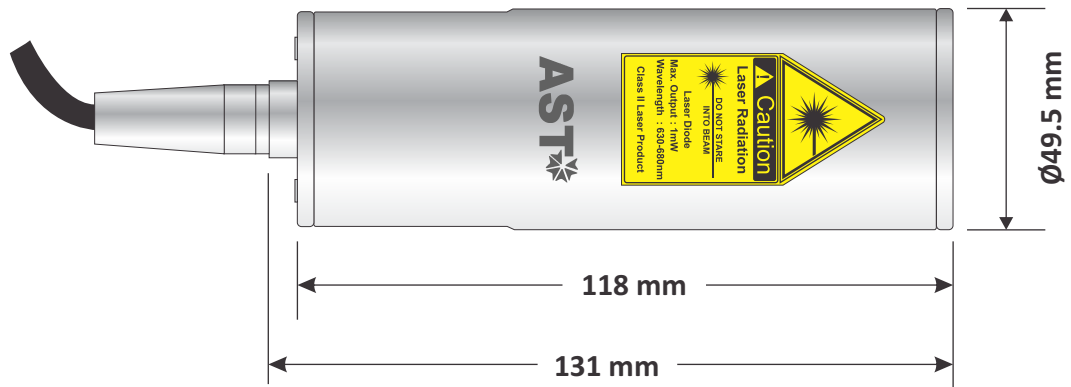


Temperature Indicator with  
retransmission output 4..20mA  
Reference No. 9000 - 01

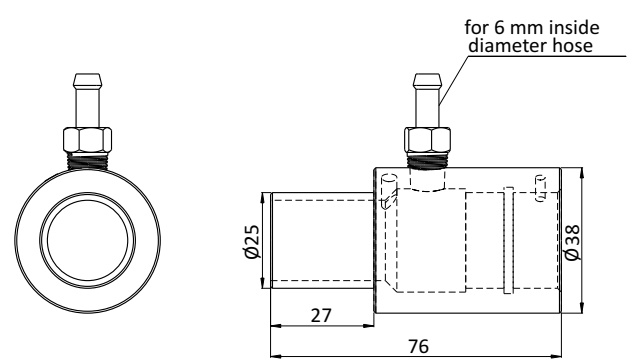


Converter Rs485 ↔ RS232  
Reference No. 9000-03

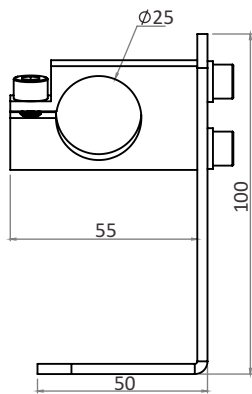




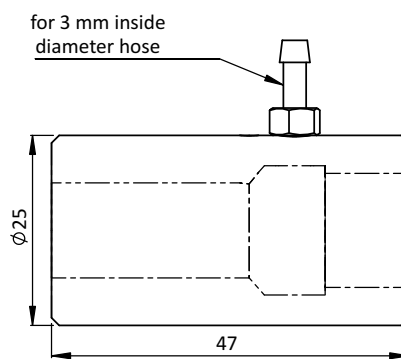
**Water Cooling Jacket & Air Purge Unit for Optical Head II**  
(Reference no: 8000-01)



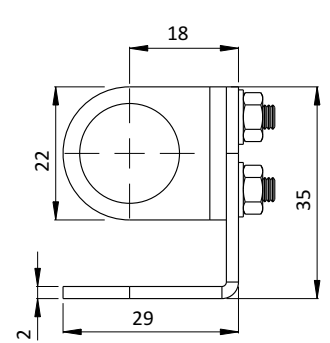
**Air Purge Unit for Optical Head II**  
(Reference no: 8200-01)



**Adjustable Mounting for Optical Head II**  
(Reference no: 8200-03)



**Air Purge Unit for Optical Head I**  
(Reference no: 8200-02)



**Adjustable Mounting for Optical Head I**  
(Reference no: 8200-04)

