



Accurate Sensors Technologies

Highly Accurate Non-Contact Pyrometer With Analogue Output and Digital Interface
300°C to 1400°C

AST AL390 model provides the advantage of non-contact temperature measurement of metallic surfaces and in flame heated furnaces i.e through flames and flue gas. At a wavelength of 3.9um hot furnaces gases and clean burning gas flames are quite transparent and therefore permit temperatures of substances to be measured as well during heating up process in industrial furnaces when using AST A L390. This format combines the high accuracy of digital signal processing with the simple connection. The AST AL390 pyrometer is used for target temperature ranging from 300°C to 1400°C. The electronic assembly is protected by IP65 rugged stainless steel housing.

AST AL390 is provided with USB 2.0 for parameter setting & Data Logging. 2Mtr long U.S.B. Cable is supplied with pyrometer.

AST AL390



Standard Scope of Supply

AST AL390 with laser targeting light, USB output, USB Cable, 5M Connection Cable Head, 1.5M communication Cable.

Application

measurement through flames & combustion without influencing the measurement.

Features

- Highly Accurate due to digital linearization of the output
- Four wire form with analog output 4 to 20mA or 0 to 20mA or 0 to 10V
- Serial communication RS-232 or RS-485
- Response time 60 ms
- Very good stability

Open Screw For USB 2.0



We Measure Temperature Accurately even in extreme conditions

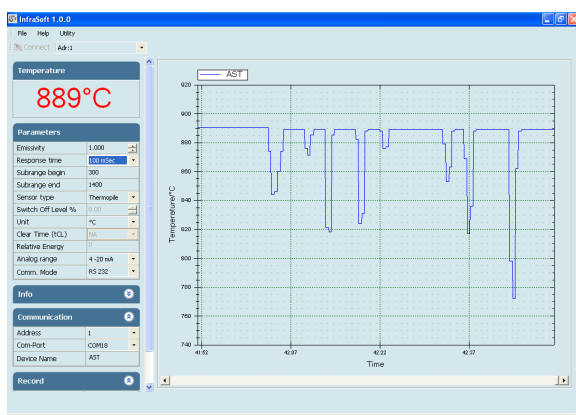
Model	AST AL390
Temperature Range (Analog sub range adjustable)	300°C to 1400°C (Analog output sub range adjustable)
Emissivity Range	0.1 1 adjustable
Spectral Range, μm	3.9 μm
Photodetector Type	Thermopile
Response Time	60msec
Accuracy	1.5 % of temperature reading (The instrument must be at a constant ambient temperature for a minimum of 25-30min)
Repeatability	0.3 % of reading in °C +1°C (whichever value is greater . The instruments must be at a constant ambient temperature for a minimum of 25-30 min. In Power on Condition)
Distance to Spot size Ratio	50 : 1
Digital output	USB 2.0, RS-232 / RS-485 (Isolated) User Selectable.
Analog output	4-20 mA or 0-20 mA or 0-10 V User selectable
Power	24V DC
Sighting	Laser pilot Light
Laser Power	<1m W
Protection class	IP65
Operating temperature range	0°C to 70°C, 0°C to 200°C (with cooling jacket)
Isolation	Power supply and digital output and analog output are galvanically isolated against each other.
Storage Temperature	-20°C to 70°C
Dimensions/Weight	Dia.= $\varnothing 49.5\text{mm}$; Length= 118mm / Weight= 0.6 kg
Adjustable Parameters via software	Emissivity, Analog output, Address, Response time, Peak picker, Analog Output sub range

Note:

After power supply initialization, keep pyrometer under stable temperature condition for 25-30 minutes for to get above stated accuracy & resolution.

Laser should be used only for targeting purpose. In normal measuring laser should be turned off to get correct measurement.

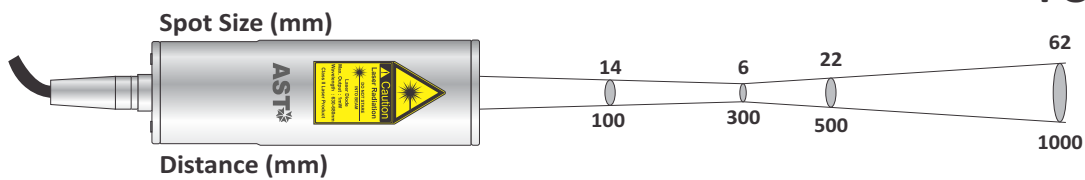
Software “Infrasoft”



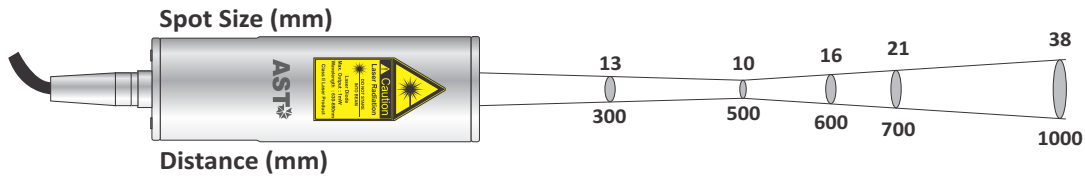
- ❖ Emissivity setting
- ❖ Response time setting
- ❖ Peak picker setting
- ❖ On-line or Off-line graphs
- ❖ Analog output Sub range
- ❖ Data logging

Optics 300

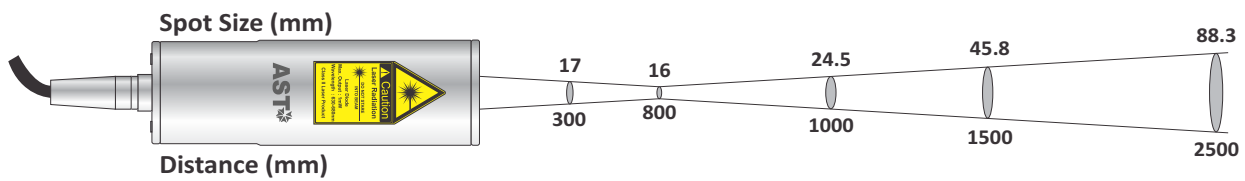
FOV 50 : 1



Optics 500



Optics 800

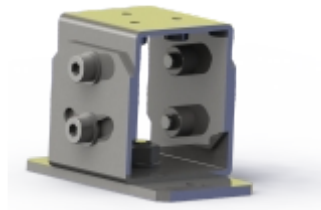


Accessories

Water Cooling Jacket with Adjustable Flange
(Reference no: 8000-02 for PL)



Adjustable Mounting Stand
(Reference no: 8000-07)



Air Purge Unit
(Reference no: 8000-04)



Adjustable Mounting Support
(Reference no: 8000-05)



Display & Parameterizer P-120
(Reference no: 9001-01)



Converter RS-232 ↔ RS-485
(Reference no: 9000-03)

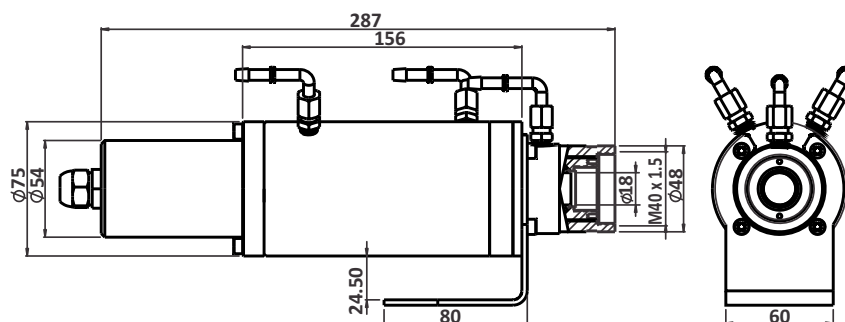
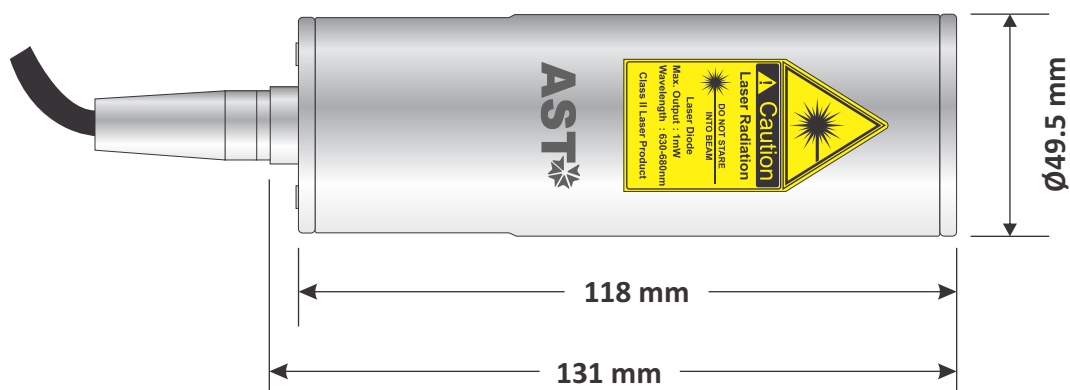


Power Supply Unit
(Reference no: 9000-02)



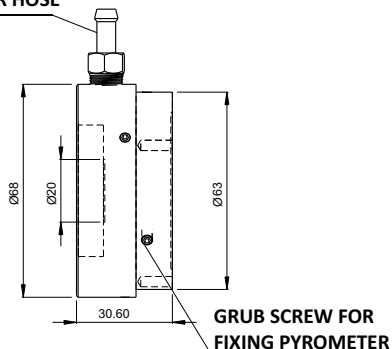
Temperature Indicator
(Reference no: 9000-01)



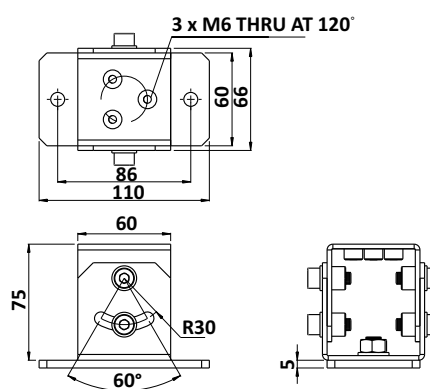


Water Cooling Jacket with Adjustable Flange PL
(Reference no: 8000-02)

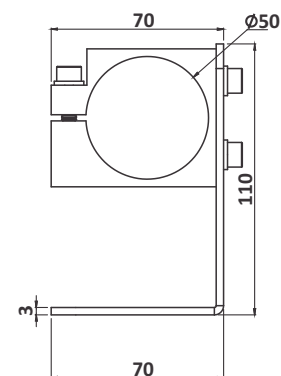
FOR 6 mm INSIDE
DIAMETER HOSE



Air Purge Unit
(Reference no: 8000-04)



Adjustable mounting stand
(Reference no: 8000-07)



Mounting Clamp
(Reference no: 8000-05)



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