AST Accurate Sensors Technologies

Highly Accurate Non-contact Pyrometer With Analog Output and Digital Interface

CE 0°C to 1000°C

AST AL30 model provides the advantage of non-contact temperature measurement on non-metallic surfaces & also on painted, coated or anodized metals. AST AL30 is designed for easy integration into standard 4 wire system. This format combines the high accuracy of digital signal processing with the simple connection. The AST AL30 pyrometer is used for target temperature ranging from 0°C to 1000°C. The electronic assembly is protected by IP 65 rugged stainless steel housing.

AST AL30 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 on and RS-232 / RS-485 output).

AST AL30

Standard Scope of Supply

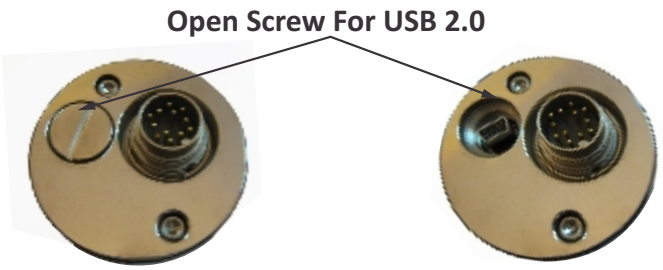
AST AL30 with laser targeting light, USB output, USB Cable, 5M Connection Cable, 1.5M Communication Cable.

Application

- **Plastic**
- **Fluids**
- **Rubber**
- **Ceramic**
- **Wood**
- **Glass**
- **Coated metals**
- **Textiles**

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**
- **Laser Targeting**



We Measure Temperature Accurately even in extreme conditions

Technical Specification

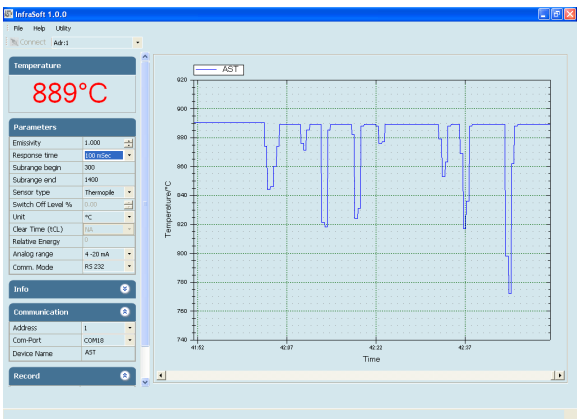
Model	AST AL30
Temperature Range **(Analog sub range adjustable)**	0°C to 1000°C, 75°C to 1000°C (Analog output sub range adjustable)
Emissivity Range	0.1 ……. 1 adjustable
Spectral Range, µm	8.....14 µm
Photodetector Type	Thermopile
Response Time	60msec
Accuracy	T = 0 to 200°C ±2% of reading in °C or 3 °C (Whichever value is greater), T = 201°C to 1000°C ±1.5% of reading in °C or 4°C (Whichever value isgreater) **(The instrument must be at a constant ambient temperature for a minimum of 30min)**
Repeatability	0.3 % of reading in °C +1°C (whichever value is greater . The instruments mist be at a constant ambient temperature for a minimum of 25-30 min. In Power on Condition)
Distance to Spot size Ratio	50 : 1, 100 : 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°to 70°C
Dimensions/Weight	Dia.= Ø49.5mm; 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.

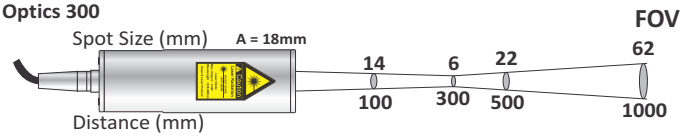
Software “Infrasoft”



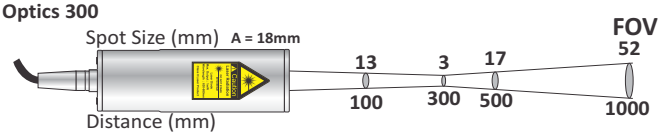
- **Emissivity setting**
- **Response time setting**
- **Peak picker setting**
- **On-line or Off-line graphs**
- **Analog output Sub range**
- **Data logging**

Spot Sizes

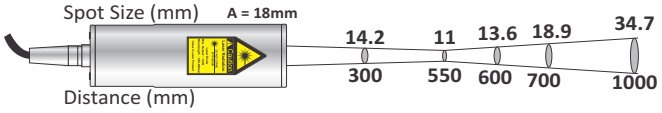
Optics 300 — FOV 50 : 1



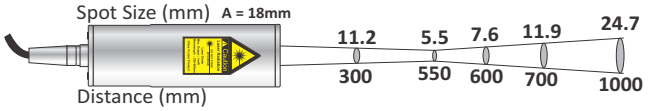
Optics 300 — FOV 100 : 1



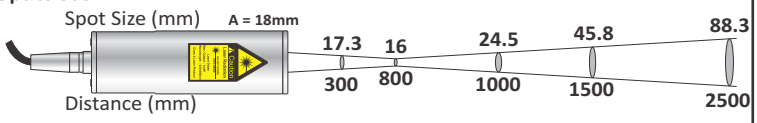
Optics 550



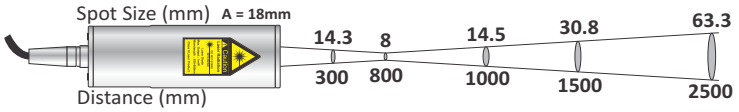
Optics 550



Optics 800



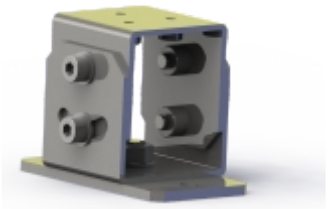
Optics 800



Accessories

Water Cooling Jacket withAdjustable 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)

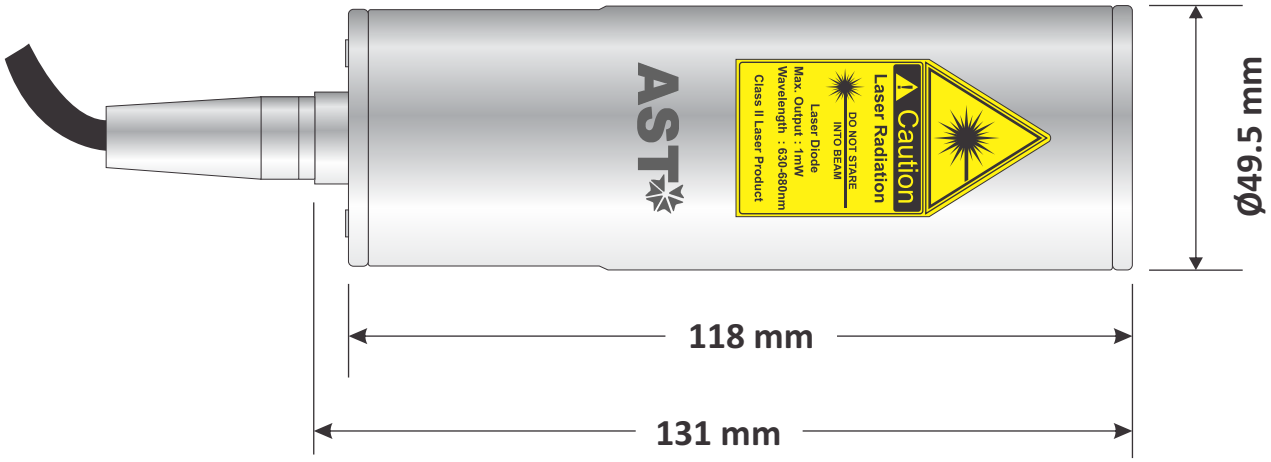
Display & Parameterizer P-120
(Reference no: 9001-01)

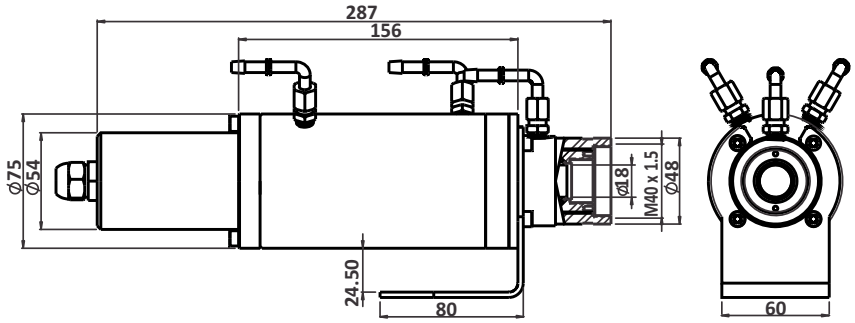
Converter RS-232 ↔ RS-485
(Reference no: 9000-03)

Power Supply Unit
(Reference no: 9000-02)

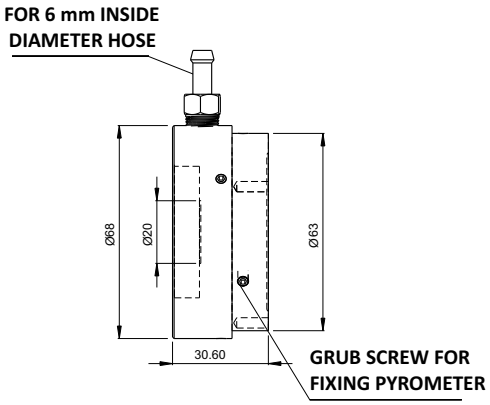
Temperature Indicator
(Reference no: 9000-01)

Pyrometer Drawing





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



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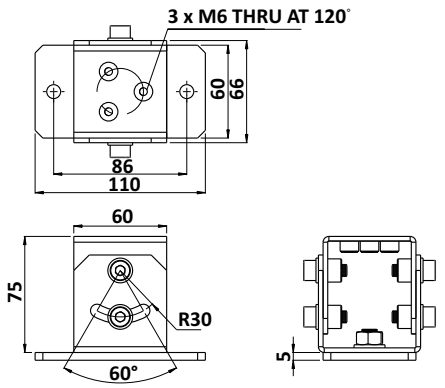
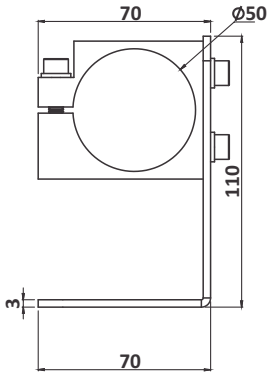
(Reference no: 8000-04)



Adjustable mounting stand
(Reference no: 8000-07)



Mounting Clamp
(Reference no: 8000-05)

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