

Highly Accurate on-line Infrared non-contact Pyrometer In Small, Short wavelength for temperature measurement of metallic surfaces, graphite or ceramics with Bluetooth  V2.0/ U.S.B. 2.0

CE 75°C to 700°C

A150 is a specially designed highly accurate digital IR Pyrometer operating at the near end of the infrared spectrum and is therefore an excellent choice for measurement of ferrous and non ferrous metals above 75°C because the emissivity of un-oxidized metal surfaces is higher at shorter wavelengths. The parameters like Emissivity, Analog output, Sub-range, Response time and Peak picker can be preset ex-works or adjusted via software. This enables the instrument to be adapted for various measuring tasks. The pyrometer has solid body in stainless steel housing which provides high operation safety even in rough industrial environment. Variety of working Distances with fixed focus available for different applications.

Technical specifications

Model	A150
Temperature Range (Analog sub-range adjustable)	75°C....700°C 100°C....700°C
Spectral Range	2 μm to 2.6 μm
Photodetector Type	Extended InGaAs
Distance to Spot Size Ratio	40:1 (75°C....700°C) 50:1 (100°C....700°C)
Emissivity (ε)	0.1....1.0 adjustable
Response Time	2 msec adjustable upto 10 sec
Accuracy	Upto 400°C: ±3°C >400°C: ±0.5% of measured value in °C + 1°C
Repeatability	0.1% of reading in °C + 1°C
Sighting Options	Laser Pilot Light (PL)
Analog Output	0-20mA, 4-20mA, 0-10V (User selectable)
Digital Output	Bluetooth V2.0/ USB2.0(Select anyone while ordering) RS-232/RS-485 (User selectable) *At a time only one digital output possible
Operating Temp. Range	0°C.....70°C 0°C.....200°C (With water cooling jacket)
Storage Temp. Range	-20°C...70°C
Adjustable Parameters and Features via Software	Emissivity, Response Time, Clear Time(Peak Picker), Analog Output, Analog Scale (Sub Range) , Unit Of Temperature(°C/°F), Communication mode (Comm. mode), Record feature etc
Power Supply	12V to 28V DC with reverse voltage protection
Power Consumption	Max 2.5 watt
Laser Power	<1 m watt
Protection Class	IP65
Housing	Stainless Steel
Isolation	Power supply, *Digital output and Analog output are galvanically isolated against each other
Operating Humidity	10-95%, Non-Condensing Conditions
Weight & Dimensions	600g Dia= Ø 49.5 mm; Length=118mm



Features

- Wide temperature ranges from 75°C to 700°C.
- Spectral range 2 μm...2.6 μm
- Laser targeting
- Fast response time within milliseconds
- Analog output options available like 0...20mA, 4...20mA, 0...10V
- Bluetooth V2.0 and RS-232/RS-485 Serial interface
- User friendly PC software for communication

Standard Scope of Supply

- Pyrometer with Laser pilot light(PL)
- Analog output 4...20mA, 0...20mA, 0...10V
- Digital Interface RS-232 & RS-485(user selectable)
- Bluetooth V2.0
- 5 mtr long connection cable with connector
- Calibration certificate, Software & Operation manual.

Optional

- Mechanical and Electrical Accessories
- Extra Cable Lengths
- 1.5 mtr. Communication Cable,

Applications

- Induction Heating
- Casting
- Annealing
- Welding
- Forging
- Sintering
- Melting
- Rolling mills
- Hardening

Spot Sizes

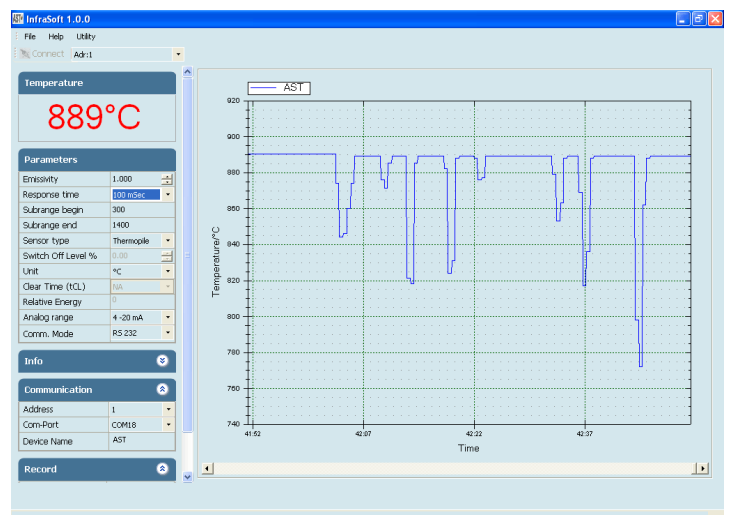
Manufactured working distance WD (mm)	350	500	700	800	1000	1500	2000	2500	3000	5000	Aperture(A)
Spot Size (40:1) 75°C - 700°C	8.75	12.5	17.5	20	25	37.5	50	62.5	75	125	18
Spot Size (50:1) 100°C - 700°C	7	10	14	16	20	30	40	50	60	100	18

Software "Infrasoft"

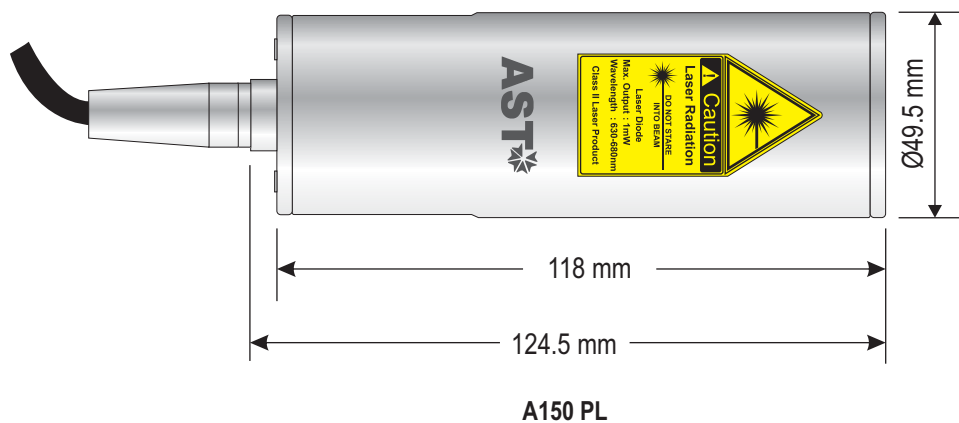
AST "Infrasoft" software is under standard scope of supply. It offers possibilities of connecting three pyrometers simultaneously for parameter setting, view real time graph, offline graph and to evaluate measuring data. Communication between the pyrometer and the software is implemented via a cable connected between the pyrometer and the PC serial port. It comes with record feature, spot size calculator and parameter settings features.

Some of the parameters adjustable via software are


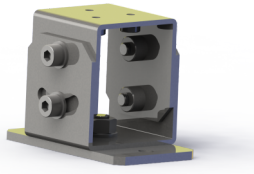






- Emissivity, Response Time,
- Clear Time(Peak Picker),
- Analog Output,
- Sub Range,
- Unit Of Temperature(°C/°F),
- Communication mode(Comm.mode).



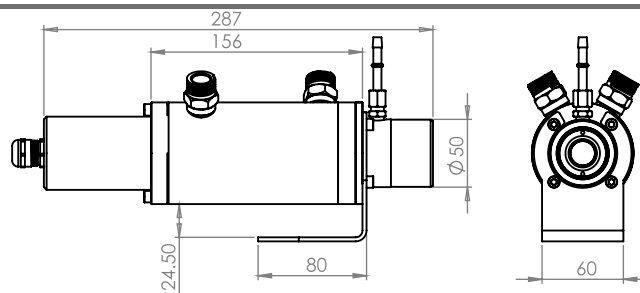
Pyrometer Drawing



Accessories

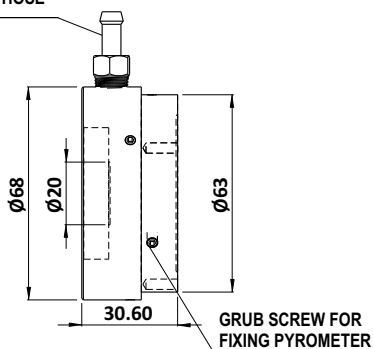
<p>Water Cooling Jacket (Reference no: 8000-06)</p>	<p>Adjustable Mounting Stand (Reference no: 8000-07)</p>	<p>Air Purge Unit (Reference no: 8000-04)</p>	<p>Adjustable Mounting Support (Reference no: 8000-05)</p>
			
<p>Display & Parameterizer P-120 (Reference no: 9001-01)</p>	<p>Converter RS-232 ↔ RS-485 (Reference no: 9000-03)</p>	<p>Power supply Input 110/230V AC Reference No. 9000 - 02 Output 24 V DC, 0.7Amp.</p>	<p>Temperature Indicator (Reference no: 9000-01)</p>
			

Pyrometer Accessories Drawings

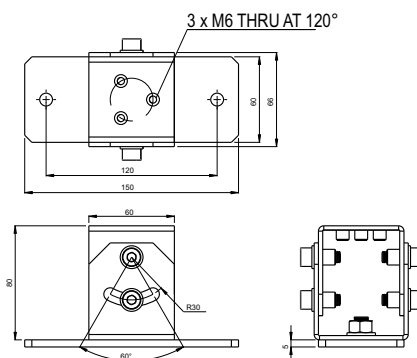


Water Cooling Jacket
(Reference no: 8000-02)

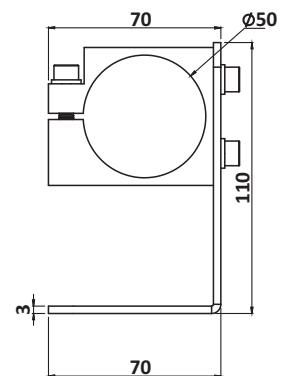
FOR 6 mm INSIDE
DIAMETER HOSE



Air Purge Unit
(Reference no: 8000-04)



Adjustable mounting stand
(Reference no: 8000-07)



Mounting Clamp
(Reference no: 8000-05)

Tempsens Instruments (I) Pvt. Ltd.

B-188 Road No.-5, M.I.A., Madri, Udaipur - 313 003 (Raj) INDIA

Ph.: +91-294-3057700 to 800, Fax.: +91-294-3057750,

E-mail: info@tempsens.com

www.tempsens.com