

AL30 Digital Infrared Pyrometers with Thermopile Sensors provides the advantage of noncontact temperature measurement of non-metallic surfaces, painted, coated or anodized metals etc. **AL30** IR Pyrometer is designed for easy integration into standard 4 wire system. This format combines the high accuracy of digital signal processing with the simple connection. **AL30** Infrared 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.

AL30 IR Thermometer 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).



Technical specifications

| Model | AL30 |
|--|---|
| Temperature Range (Analog sub-range adjustable) | 0°C....1000°C 75°C...1000°C |
| Spectral Range | 8 μm...14 μm |
| Photodetector Type | Thermopile |
| Distance to Spot Size Ratio | 50:1 100:1 |
| Emissivity (ε) | 0.1....1.2 adjustable |
| Response Time | 60 msec adjustable upto 10sec |
| Accuracy | T < 200°C; ± 1.5% of measured value or 3°C whichever is greater T ≥ 200°C; ± 1% of measured value or 4°C whichever is greater (The instrument must be at constant ambient temperature for minimum 25-30 mins in power on condition) |
| Repeatability | 0.3% of reading in °C + 1°C |
| Sighting Option | Laser Pilot Light (PL) |
| Analog Output | 0-20mA, 4-20mA, 0-10V (User selectable) |
| Digital Output | USB 2.0 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 | 24V DC |
| 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 * Not applicable for USB 2.0 digital output |
| Operating Humidity | 10-95%, Non-Condensing Conditions |
| Weight & Dimensions | 600g Dia= Ø 49.5 mm; Length=118mm |

Features

- Highly Accurate due to digital linearization of the output
- Temperature range from 0°C....1000°C
- Spectral range 8 μm...14 μm
- Four wire form with Analog output 4...20mA or 0...20mA or 0...10V
- Serial communication RS-232/RS-485
- Fast response time of 60 ms
- Very good stability
- Laser Targeting for precision targeting
- User friendly Software

Standard Scope of Supply

- Pyrometer with Laser pilot light(PL)
- Analog output 4...20mA, 0..20mA, 0..10V
- USB 2.0 Digital output, USB Cable
- Digital Interface RS-232 / RS-485(user selectable)
- 5 mtr long connection cable with connector
- 1.5 mtr. Communication Cable
- Calibration certificate, Software & Operation manual

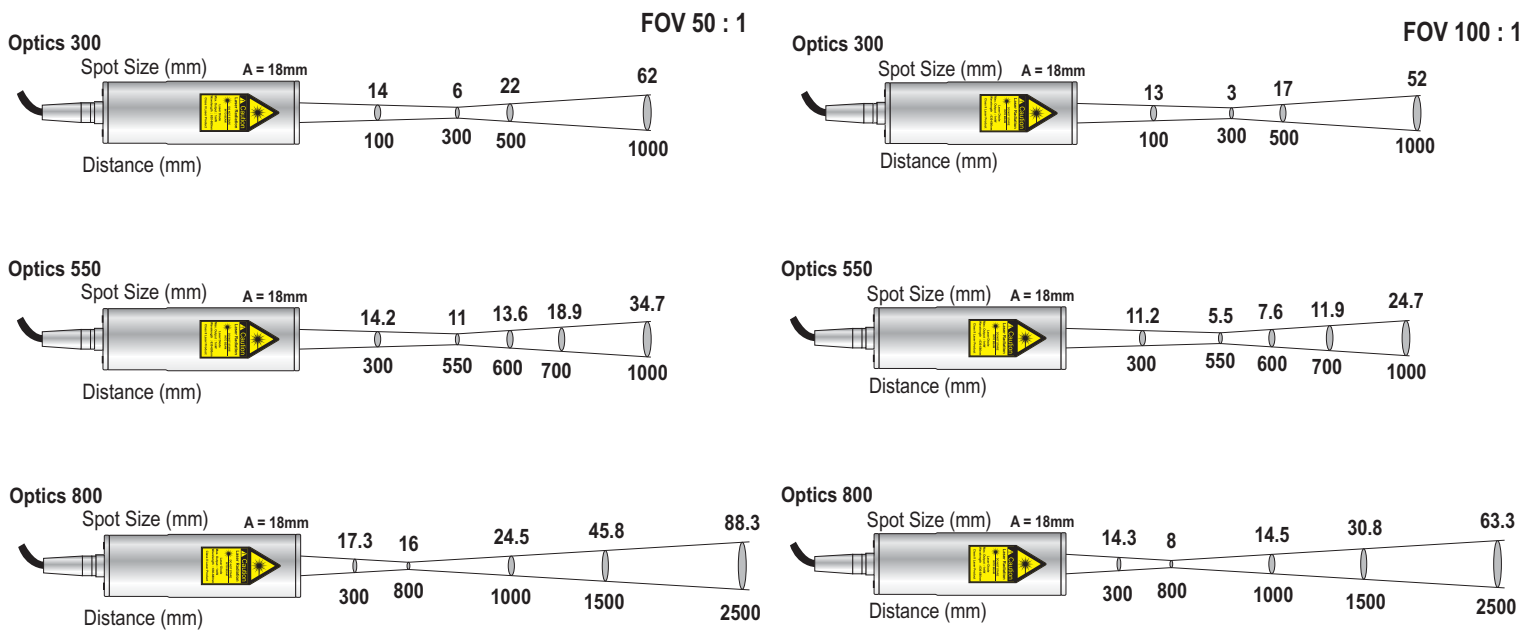
Optional

- Mechanical & Electrical Accessories
- Extra Cable lengths

Applications

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

Spot Sizes

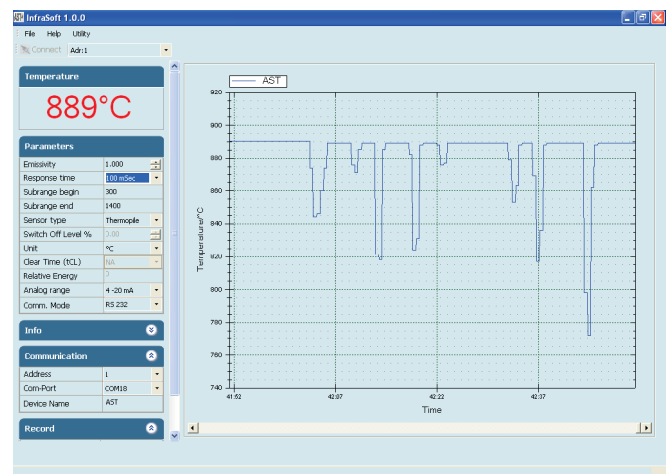


Software "Infrasoft"

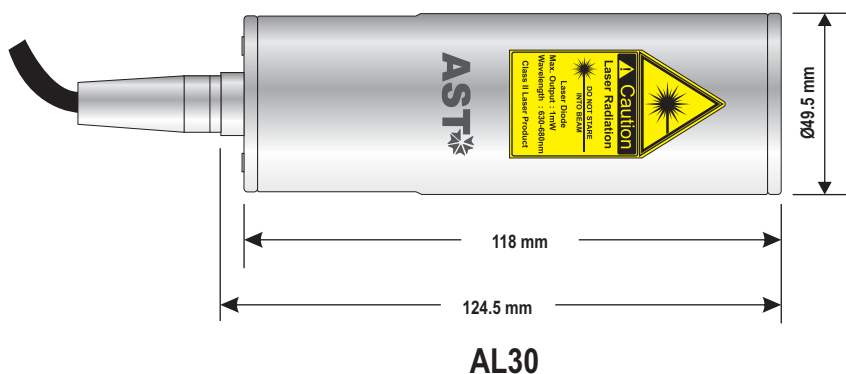
AST "Infrasoft" software is under standard scope of supply. It offers possibilities of connecting three pyrometers simultaneously for parameter setting, view real time graph, offline graph and to evaluate measuring data. Communication between the pyrometer and the software is implemented via a cable 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



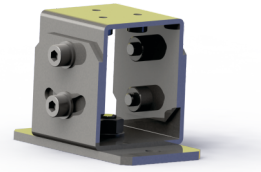
We measure accurate temperature in extreme conditions

Accessories

Water Cooling Jacket
(Reference no: 8000-08)



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)



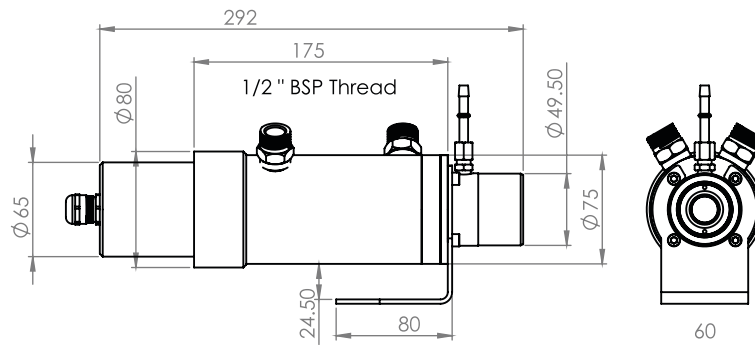
Power supply Input 110/230V AC
Reference No. 9000 - 02
Output 24 V DC, 0.7Amp.



Temperature Indicator
(Reference no: 9000-01)

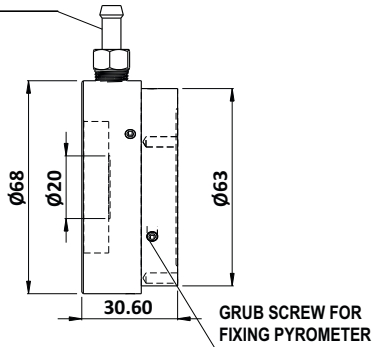


Pyrometer Accessories Drawings

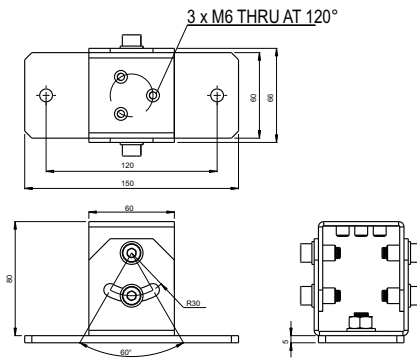


Water Cooling Jacket
(Reference no: 8000-08)

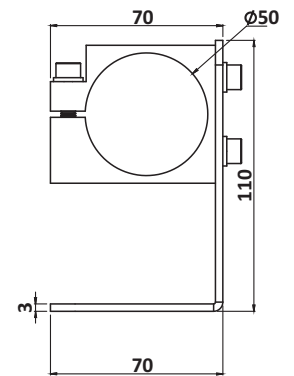
FOR 6 mm INSIDE
DIAMETER HOSE



Air Purge Unit
(Reference no: 8000-04)



Adjustable mounting stand
(Reference no: 8000-07)



Mounting Clamp
(Reference no: 8000-05)

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