

## Highly Accurate On-Line Infrared Focusable Non-Contact Pyrometers

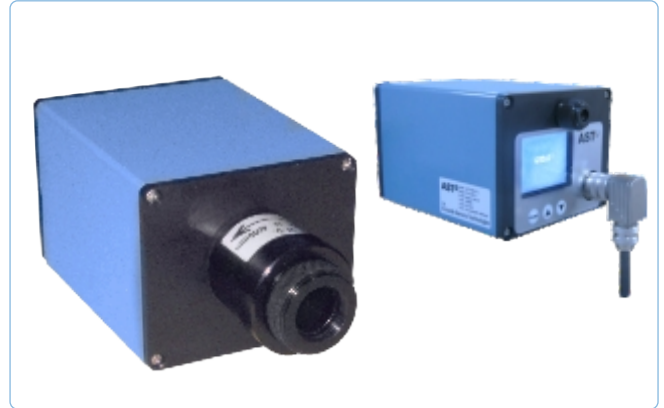
CE 300°C to 2500°C

• A250+ • A450+

**A250+** and **A450+** are highly accurate IR Focusable Pyrometers They are useful in providing high performance with low maintenance for non contact temperature measurement in demanding industrial and R&D environments.

The parameters of the IR Pyrometer can be selected via the key pads on the back panel. The settings are displayed on the large colour video LCD (55.5 (W) x 47.9 (H) x 3.17 (D)). In measuring mode real time temperature and emissivity is displayed. In Focusable IR Pyrometers with video module the real time colour video, measuring temperature and emissivity is displayed on the LCD screen.

**A250+** and **A450+** have Focusable optics for optimal match of the instrument to various application requirements. The IR Pyrometers are equipped with user selectable RS-232/ RS-485 switchable interface. The Analog outputs provided are 0/4....20mA, 0...10V. For data logging and remote parameterization PC software "Infrasoft" is provided. For precise targeting a Laser targeting light or Through the lens sighting or Video output(optional) is provided.

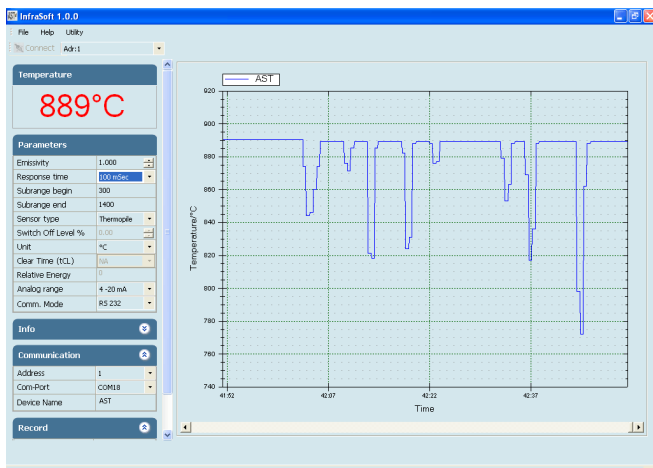


### Software "Infrasoft"

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)



### Features

- Focusable optics
- Built-in digital display
- Spectral range 1.0 μm....1.6 μm
- Key pad on the back panel for parameter setting
- Through-lens view finder, Laser targeting light or Video module
- Fast response time of 2 ms adjustable upto 10 sec
- Extremely small spot sizes
- User selectable RS-232/ RS-485 switchable interface
- Analog output 0....20mA, 4....20mA or 0...10V

### Standard Scope of Supply

- Integrated laser pilot light or Through the lens sighting
- Analog Output 0...20mA, 4....20mA, 0-10V
- Digital Interface RS-232/RS-485
- Display & Parameterizing keys
- 5 mtr long connection cable with connector
- Focusable Optics
- Integrated LCD display
- Calibration certificate, PC Software & Operation Manual

### Optional

- Mechanical and Electrical Accessories
- Extra Cable Lengths
- Video Module

### Applications

- Preheating
- Annealing
- Tempering
- Welding
- Forging
- Hardening
- Sintering
- Melting
- Soldering
- Rolling
- Brazing
- Normalizing

We measure accurate temperature in extreme conditions

## Technical Specifications

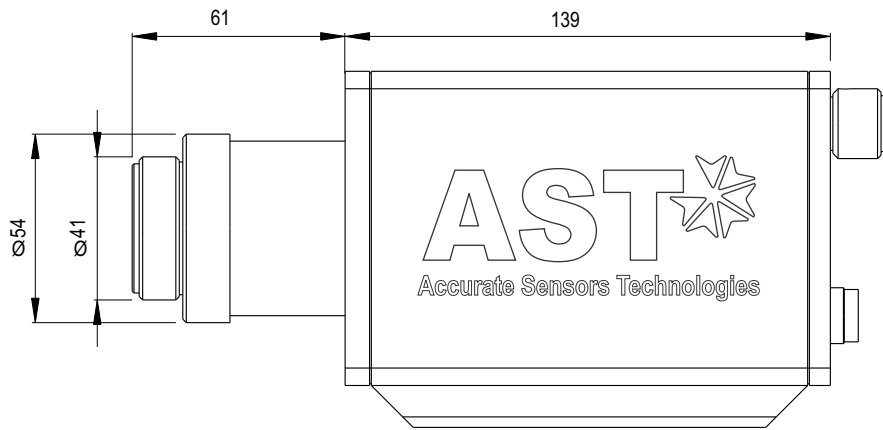
Model	A250+	A450+
Temperature Range (Analog sub-range adjustable)	300°C.....1300°C 350°C.....1800°C 450°C.....2500°C	600°C.....1900°C 700°C.....2500°C
Spectral Range	1.6 μm	1.0 μm
Photodetector Type	InGaAs	Si
Distance to Spot Size Ratio	100:1 (300°C - 1300°C) 200:1 (350°C - 1800°C) 400:1 (450°C - 2500°C)	200:1 (600°C - 1900°C) 400:1 (700°C - 2500°C)
Emissivity (ε)	0.1.....1.0 Adjustable	
Response Time	2 msec adjustable upto 10 sec	
Accuracy	± 0.3% of the measured value + 1°C	
Repeatability	0.1% reading in °C +1°C	
Sighting Option	Laser Pilot Light(PL),Through The Lens (TL) and Video module	
Analog Output	0-20 mA, 4-20 mA,0-10 V (User selectable)	
Digital Output	RS-232/RS-485 (User Selectable)	
Operating Temp. Range	0°C.....70°C	
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.	
Adjustable Parameters via Keypad	Emissivity, Comm. Mode, Analog Sub Range, Analog Output, Unit of temperature, Sensor address, Response Time, Clear Time( Peak Picker) etc.	
Power Supply	24V DC	
Power Consumption	Max 5.0 watt	
Laser Power	< 1 mwatt	
Protection Class	IP65	
Housing	Aluminium	
Isolation	Power supply, Digital output and Analog output are galvanically isolated against each other	
Operating Humidity	10-95%, non condensing conditions	
Weight & Dimensions	1.5 kg 139 mm x 112 mm x 90 mm (L x W x H)	

## Spot Sizes

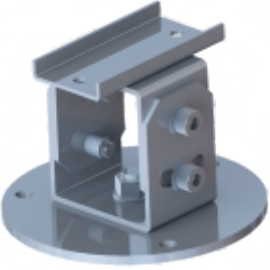
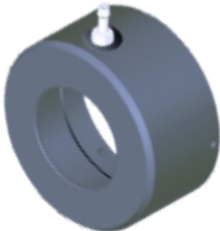
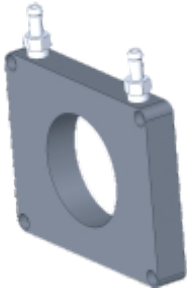



Measuring Distances(mm)	A250+			A450+	
	Spot Sizes(mm) 300 - 1300°C	Spot Sizes(mm) 350 - 1800°C	Spot Sizes(mm) 450 - 2500°C	Spot Sizes(mm) 600 - 1900°C	Spot Sizes(mm) 700 - 2500°C
550	5.5	2.75	1.37	2.75	1.37
800	8	4	2	4	2
1000	10	5	2.5	5	2.5
2000	20	10	5	10	5
4000	40	20	10	20	10

We measure accurate temperature in extreme conditions

## Pyrometer Drawing



## Accessories

Adjustable Mounting (Reference no: 8500-03)	Airpurge Unit (Reference no: 8500-01)	Water Cooling Plate (Reference no: 8500-02)	Display & Parameterizer P-120 (Reference no: 9001-01)
			
<p>Converter RS-232 ↔ RS-485 (Reference no: 9000-03)</p>		<p>Power Supply Unit (Reference no: 9000-02)</p>	
			

**AST**   
**Accurate Sensors Technologies**

Misgav Industrial Park, Misgav 20174 Israel  
 Ph. : +972-4-9990025, Fax : +972-4-9990031  
 E-mail : [info@accuratesensors.com](mailto:info@accuratesensors.com)  
[www.accuratesensors.com](http://www.accuratesensors.com)



We measure accurate temperature in extreme conditions