

Highly Accurate - Online Infrared Non-Contact Pyrometer for Aluminum

300 to 1000°C (572 to 1832°F) • 350 to 1300°C (662 to 2372°F) • 380 to 1500°C (716 to 2732°F) • 440 to 2000°C (824 to 3632°F)

AST A5-IN is a specially designed IR Pyrometers for non-contact temperature measurement of aluminum.

AST A5-IN is a Multi-wavelength plug-and-play pyrometer that uses an application-specific database derived from years of experience in a real application.

AST A5-IN uses special algorithms to accurately calculate both the actual temperature and emissivity of the surface.

AST A5-IN can hold multiple databases so that a single instrument can be easily switched between multiple applications like Molten metal, Extruded profiles, Rolled aluminum surface, Continuous casting, Aluminum billets, Slabs, etc.

AST A5-IN has a laser pointer aligned in line with the detector to ensure both laser and detector look in the same spot. This helps precise aiming even in long distances.

AST A5-IN offers Bluetooth communication to communicate with Android smartphones or laptops to view the measured temperature and adjust the parameters/selection of database and data logging.



Features

- Simple to use - No calibration required
- High accuracy - (1%) in real site conditions
- Capable of measuring targets with variable emissivity
- Measures through smoke, dust, water vapor etc.
- Temperature ranges - see the table on next page.
- Temperature range for measurement in front of a blackbody, when measuring a shiny body minimum temperature will be higher.
- Rugged design
- Wide range of built-in functions
- AST NET SW software for PC
- AST Pyrometer Android Application via Bluetooth

Standard Scope of Supply

- Integrated laser pilot light
- Digital Interface RS-232
- Analog Output: 0...20mA or 4...20mA or 0-10V
- Calibration certificate, PC Software & Operation

Optional

- Mechanical and Electrical Accessories
- RS422, RS485, OpenBus USB, Bluetooth Alarm

Applications

- Aluminium Extrusion Profiles & Billets
- Aluminium Rolling
- Aluminum Casting
- Aluminium Forging
- Aluminium Continuous Casting

Software

AST NET SW AST Pyrometer

◆ Measurement Readout ◆ Parameterization ◆ Datalogging

The screenshot displays the AST NET SW software interface. It features a main measurement readout showing 255°C. Below this, there are several configuration windows. One window shows 'Analytical Coefficients' with values for DX (1.030), DY (-0.014), and DZ (9.090). Another window shows 'Measurement' parameters including Temperature (3095.2), Emissivity (0.01), and T Brightness 1 (1131.8). A third window shows 'Parameters' for the pyrometer, including Analog Range (min 300, max 700), Tau (255 ms), T Bright min (200), and Moving Average (1). The interface is designed for easy parameter adjustment and data logging.

Technical Specifications

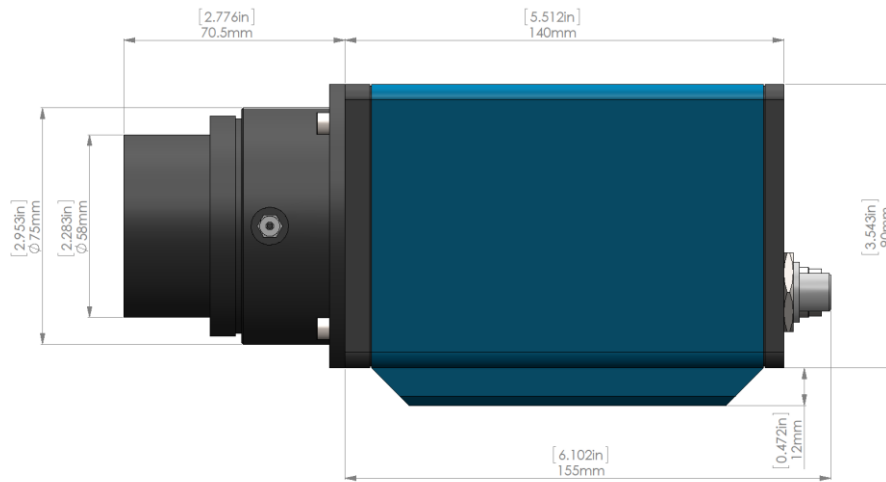
Specification	Model A5-IN	
Temperature Range (Analog sub-range adjustable)	300 - 1000°C	572 - 1832°F
	350 - 1300°C	662 - 2372°F
	380 - 1500°C	716 - 2732°F
	440 - 2000°C	824 - 3632°F
Spectral Range	1.3...1.6 μm	
Photodetector Type	InGaAs	
Distance to Spot Size Ratio	100:1	
	200:1	
Protection Class	IP65	
Response Time	Adjustable from 0.1 sec to 17 sec	
Accuracy and Repeatability	±1%	
Sighting	Integrated Laser Pilot Light	
Power Supply	24VDC	
Analog Output	4-20 mA, 0-20 mA, 0-10V, Alarm	
Digital Output	RS-232, RS-422, RS-485, USB, Bluetooth	
Digital Display	P110	
Sensor overall dimensions	215 x 110 x 105 mm / 8.46 x 4.33 x 4.13 in	
Sensor weight	~2.0Kg / ~4.4lbs	
Operating temperature range	0 to +50°C / 32 to +122°F	
Storage temperature range	-20 to +70°C / -4 to +158°F	

Spot Sizes

Measuring Distances [mm] / [in]	A5-IN Spot Sizes [mm] / [in]			
	FOV 1:100	FOV 1:200		
	300 - 1000°C 572 - 1832°F	350 - 1300°C 662 - 2372°F	380 - 1500°C 716 - 2732°F	440 - 2000°C 824 - 3632°F
500 / 20	5 / 0.2	2.5 / 0.1		
1000 / 40	10 / 0.4	5 / 0.2		
1500 / 60	15 / 0.6	7 / 0.3		
2000 / 80	20 / 0.8	10 / 0.4		
2500 / 100	25 / 1.0	12.5 / 0.5		
5000 / 200	50 / 2.0	25 / 1.0		

We measure accurate temperature in extreme conditions

Pyrometer Drawing



Accessories

AS3000 Application Selector
(Reference no: 300-07)



Power Supply Unit
(Reference no: 200-09)



Air Purge Tube 200 mm
(Reference no: 200-03)



Display
(Reference no: P-110)



Adjustable Mounting
(Reference no: 200-01)



Air Purge Tube Adapter
(Reference no: 200-02)



Frontal Water-Cooling Plate
(Reference no: 200-06)



Top Water-Cooling Plate
(Reference no: 200-10)



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We measure accurate temperature in extreme conditions