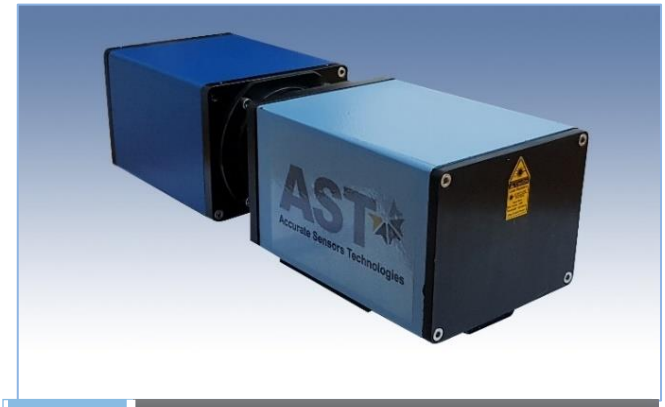
AST Accurate Sensors Technology

Highly Accurate IR Non-Contact Pyrometers with built-in scanning system for Aluminum

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-S-IN

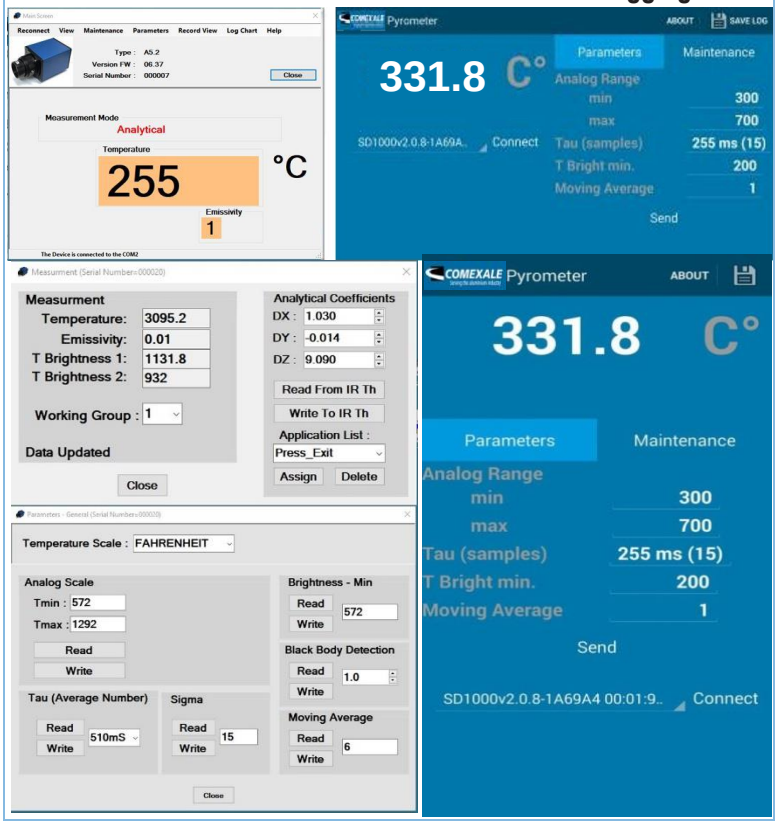
AST A5-S-IN is a specially designed IR Pyrometers for non-contact temperature measurement of aluminum.
AST A5-S-IN is a Multi-wavelength plug-and-play pyrometer that uses an application-specific database derived from years of experience in a real application.
AST A5-S-IN uses special algorithms to accurately calculate both the actual temperature and emissivity of the surface.
AST A5-S-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-S-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-S-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



Software

A5-NET **AST-Pyrometer App**

♦ Measurement Readout ♦ Parameterization ♦ Data logging



Features

- High accuracy - (1%) in real site conditions
- Capable of measuring targets with variable emissivity
- Measuring through smoke, dust, water vapor, etc.
- Temperature range - see table at the beginning of the next page.
- Temperature range for measurement in front of a blackbody; when measuring a shiny body, the minimum temperature will be higher.
- Rugged design
- AST NET SW software for PC
- AST Pyrometer Android Application via Bluetooth
- Selection of scanning modes:
- Hottest point
- One-Shot point
- Program point
- Continuous scanning (pendulum mode)
- Adjustable scanning range up to ± 20°
- Adjustable scanning step from 0.1° to 5°
- Adjustable scanning time
- Minimal working distance 1 meter

Standard Scope of Supply

- Integrated laser pilot light
- Digital Interface RS-232 & Analog output
- Calibration certificate, PC Software & Operation Manual

Optional

- Mechanical and Electrical Accessories
- Digital Output RS485, OpenBus,USB, Bluetooth, Alarm

Applications

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

We measure accurate temperature in extreme conditions

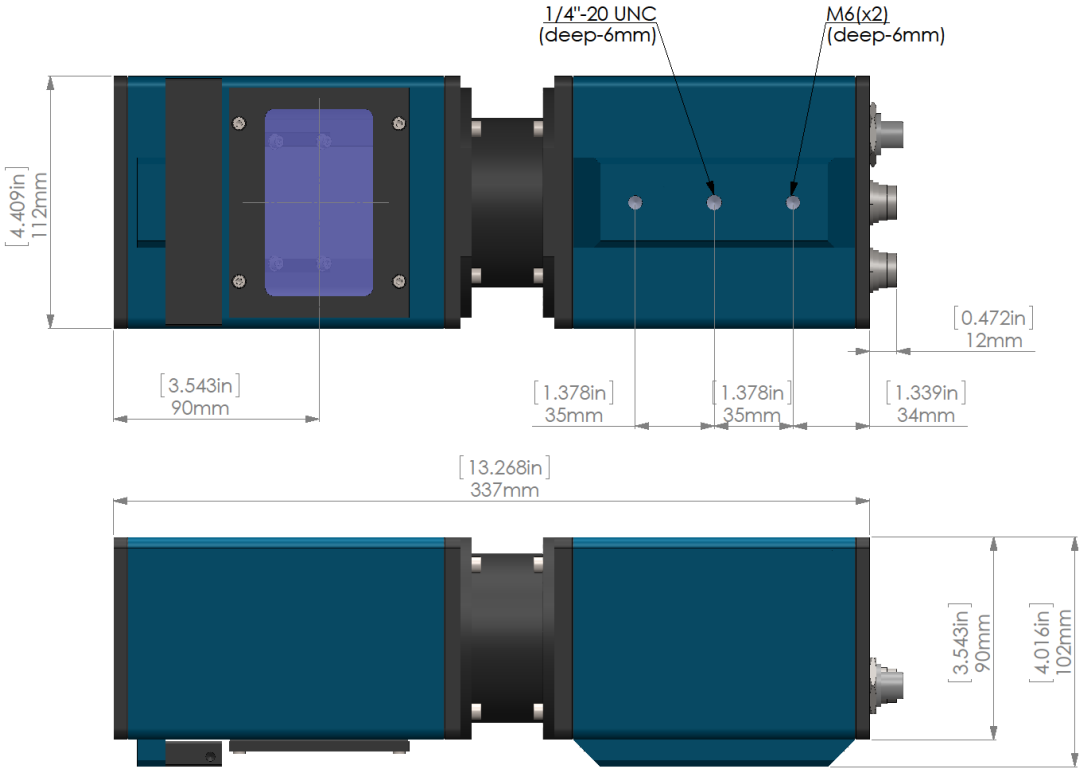
Technical Specifications

Specification	Model A5-S-IN
Temperature Range (Analog sub-range adjustable)	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
Humidity	IP65
Response Time	Adjustable from 0.1 sec to 17 sec
Default Value	0.5 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, RS485, USB, Bluetooth
Digital Display	P110
Adjustable Scanning Range	Up to ±20°
Adjustable Scanning Step	From 0.1 to 5°
Number of Automatically Scanning Modes	4
Pyrometer Scanner Overall Dimensions	355 x 110 x 105 mm / 14 x 4.33 x 4.13 in
Pyrometer Scanner Weight	3.4Kg / 7.5lbs
Operating temperature range	0 s +50°C / 32 to +122°F
Storage temperature range	-20 to +70°C / -4 to +158°F

Spot Sizes

Measuring Distances [mm] / [in]	A5-S-IN Spot Sizes [mm] / [in]		
	FOV 1:100	FOV 1:200	
	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	

Pyrometer Drawing



Accessories

Adjustable Mounting (Reference no:200-08)	Top Water-Cooling Plate (Reference no: 200-10)	Display (Reference no: P-110)
		
AS3000 Application Selector (Reference no: 300-07)	**Frontal Water-Cooling Plate (Reference no: 200-06)**	Power Supply Unit (Reference no: 300-09)
		

Accurate Sensors Technologies

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