



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

90°C to 850°C (194°F to 1562°F) • 200°C to 1640°C (392°F to 2984°F) •  
250°C to 1850°C (482°F to 3362°F) • 360°C to 2500°C (680°F to 4532°F)

**AST A5-S-EX**

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

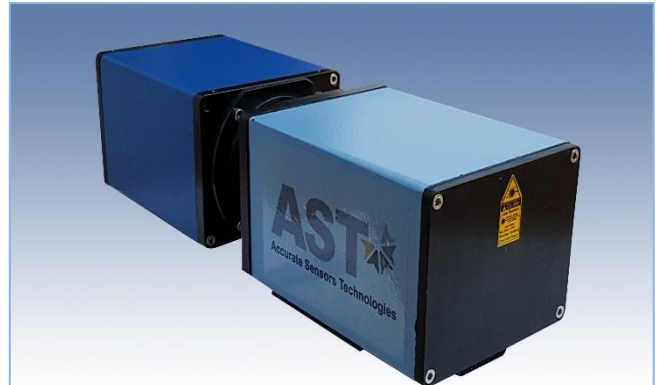
**AST A5-S-EX** is a Multi-wavelength plug-and-play pyrometer that uses an application-specific database derived from years of experience in a real application.

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

**AST A5-S-EX** 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-EX** 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-EX** 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

- 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  $\pm 20^\circ$
- Adjustable scanning step from  $0.1^\circ$  to  $5^\circ$
- Adjustable scanning time
- Minimal working distance 1 meter

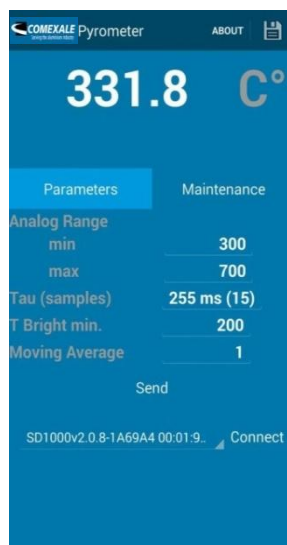
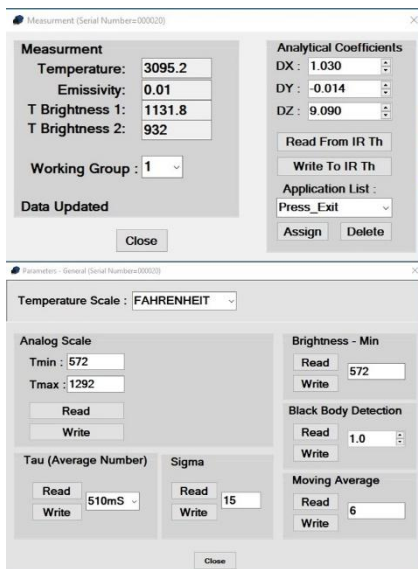
### Software

#### AST NET SW

#### ◆ Measurement Readout ◆ Parameterization ◆ Datalogging



#### AST Pyrometer



### 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

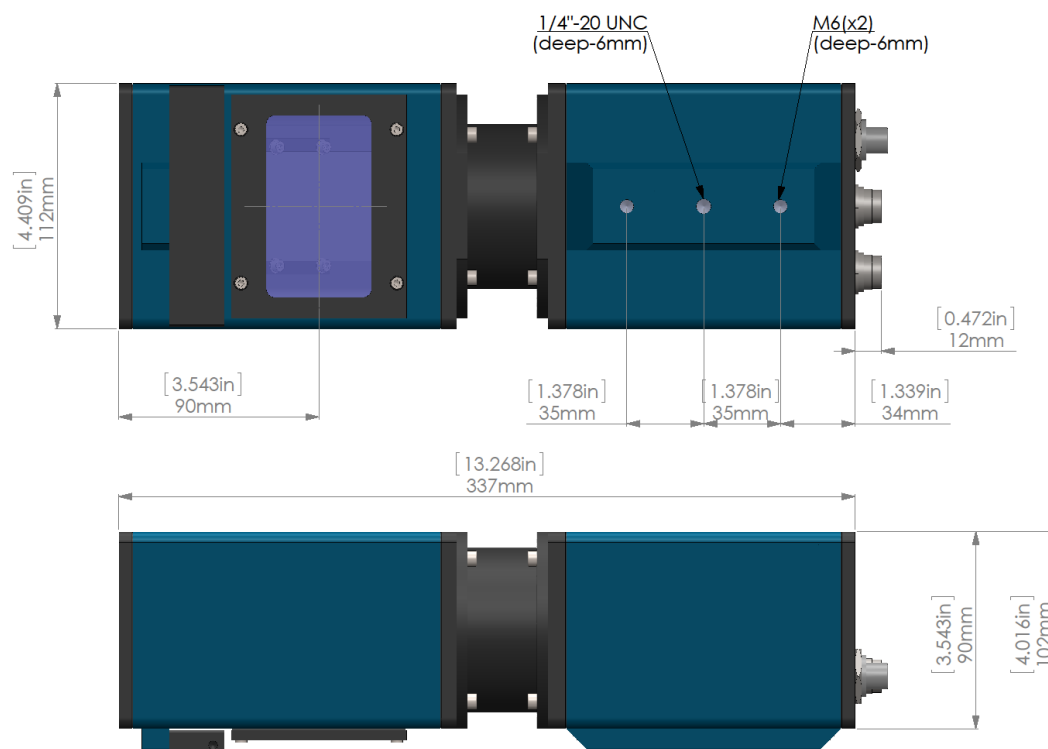
## Technical Specifications

Specification	Model A5-S-EX	
Temperature Range (Analog sub-range adjustable)	90 - 850°C	194 - 1562°F
	200 - 1640°C	392 - 2984°F
	250 - 1850°C	482 - 3362°F
	360 - 2500°C	680 - 4532°F
Spectral Range	2.1...2.4 $\mu$ m	
Photodetector Type	InGaAs Extended	
Humidity	IP65	
Response Time	Adjustable from 0.1 sec to 17 sec	
Default Value	0.5 sec	
Accuracy and Repeatability	$\pm 1\%$	
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 $\pm 20^\circ$	
Adjustable Scanning Step	From 0.1 to $5^\circ$	
Number of Automatically Scanning Modes	4	
Pyrometer Scanner Overall Dimensions	355 x 110 x 105 mm	
Pyrometer Scanner Weight	3.4Kg	
Operating temperature range	0°C to +50°C / 32°F to +122°F	
Storage temperature range	-20°C to +70°C / -4°F to +158°F	

We measure accurate temperature in extreme conditions

Measuring Distances [mm] / [in]	A5-S-EX Spot Sizes [mm] / [in]			
	FOV 1:100	FOV 1:200		
	90 - 850°C 194 - 1562°F	200 - 1640°C 392 - 2984°F	250 - 1850°C 482 - 3362°F	360 - 2500°C 680 - 4532°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)



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We measure accurate temperature in extreme conditions