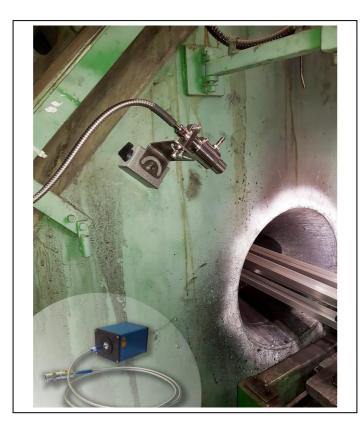


# Accurate Sensors Technology

Highly Accurate Online Infrared Non-Contact Pyrometers for Aluminum.

A5-EX-FO: 170 to 3000°C (338 to 5432°F)

A5-EX-FO



AST A5-EX-FO is a specially designed IR Pyrometer for noncontact temperature measurement of aluminum.

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

AST A5-EX-FO uses unique algorithms to accurately calculate the actual temperature and emissivity of the surface.

AST A5-EX-FO can hold multiple databases so that a single instrument can easily switch between applications like Molten metal, extruded profiles, Rolled aluminum surfaces, Continuous casting, Aluminum billets, Slabs, etc.

It has a laser pointer that is aligned in line with the detector so that it ensures both laser and detector are aimed into the same spot. This helps precise aiming even in long distances.

AST A5-EX-FO offers Bluetooth communication so that it can communicate with Android smartphones or laptops for viewing the measured temperature and for adjusting the parameters/selection of database and data logging

#### Standard Scope of Supply

- Integrated laser pilot light
- Digital Interface RS-232
- Analog output 4-20mA
- Calibration Certificate, PC Software & Operation Manual

#### Optional

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

#### **Applications**

Aluminum Extrusion Profiles & Billets

- Aluminum Rolling
- **Aluminum Casting**
- Aluminum Forging
- Aluminum Continuous Casting

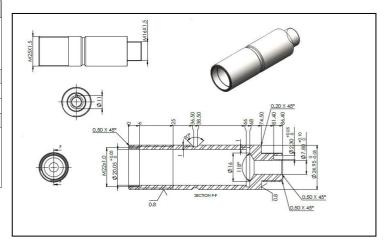


- Simple to use No calibration required
- High accuracy (1%) in real site conditions
- Capable of measuring targets with variable emissivity
- Measures through smoke, dust, water vapor, etc.
- Temperature ranges see the table on the next page.
- Temperature range for measurement in front of a blackbody: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

### **Technical Specifications**

Specification	(Range 2.0-2.5mkm, InGaAs Extended)		
Temperature Range (Analog sub- range adjustable)	170 - 980°C 338- 1790°F 450 -1500°C 842 - 2732°F 500-3000°C 932 - 5432°F		
Spectral Range	$2.1\mu / 2.4\mu$		
Photodetector Type	InGaAs Extended		
Distance to Spot Size Ratio	See the table of spot sizes.		
Protection Class	IP65		
Response Time t90	Adjustable from 0.1 sec to 17 sec		
Accuracy and Repeatability	0.25% ± 2°C (3.6°F) of measured value for the full range of emissivity		
Sighting	Integrated Laser Pilot Light 650-670nm		
Power Supply	24VDC		
Analog Output	4-20 mA, 0-20 mA, 0-10V, K Type T/C		
Digital Output	RS-232, RS-422, RS-485, USB, Bluetooth Modbus, OpenBus		
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°C +50°C / 32°F +122°F		
Storage temperature range	-20°C +70°C / -4°F +158°F		

		A5-EX-FO	A5-EX-FO-S
Optical Head	Working Distances (mm) / [in]	Spot Sizes (mm) / [in]	Spot Sizes (mm) / [in]
	90 / 3.6	1.5 / 0.059	0.5/0.019
	140 / 5,5	1.8 / 0.07	0.6/0.023
	200 / 7.9	3.0 / 0.11	1.0/0.039
	600 / 23.6	9.0 / 0.35	3.0/0.118
Optical Head - II	4500 /177.1	69.0 / 2.71	23.0/0905
Optical fiedu - II			



## Pyrometer Drawing











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