

Highly Accurate On-Line Infrared Non-Contact Pyrometers with built-in scanning system for Aluminum and other Non Ferrous Application

170°C to 550°C • 200°C to 650°C • 250°C to 870°C • 300°C to 1150°C

**AST A4-S-EX** 

Materials with low or variable emissivity like Aluminium, Brass, Bronze, Copper and other non gray body materials are quite impossible to measure accurately using single or ratio wavelength Infrared Pyrometers.

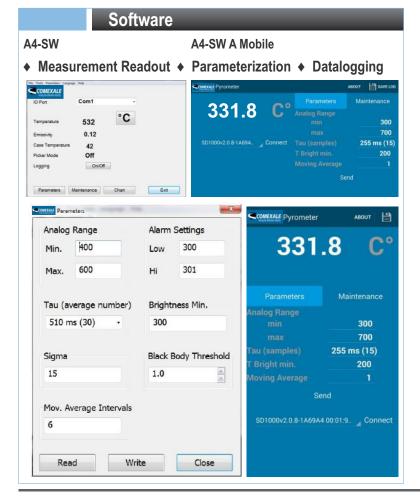
AST A4-S-EX is a Multi-wavelength plug and play pyrometer scanner use application specific data base derived from years of experience in real application.

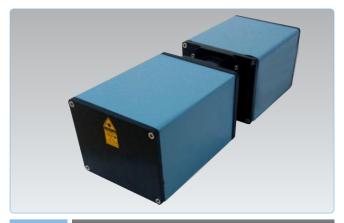
AST A4-S-EX use special algorithms to accurately calculate both the actual temperature and emissivity of the surface.

AST A4-S-EX can hold multiple data base so that single instrument can be easily switched between multiple application like Molten metal, Extruded profiles, Rolled aluminium surface, Continuous casting, Aluminum billets, Slabs etc.

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

AST A4-S-EX offer Bluetooth communication so that it can communicate with Android smart phones or laptop for viewing the measured temperature and for adjusting the parameters / selection of data base 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 range 300°C to 670°C; 350°C to 850°C; 400°C to 1000°C; 500 to 1270°C
- Rugged design
- · Full range of accessories
- · Wide range of built-in functions
- A4-SW Application software for PC
- · A4-SW A Mobile Application software for Android via Bluetooth
- Selection of scanning modes:
  - Hottest point
  - · Smooth point
  - Program point (pendulum mode)
  - Continuous scanning (pendulum mode)
- Adjustable scanning range up to ± 10°
- Adjustable scanning step from 0.1° to 5°
- Adjustable scanning time
- Minimal working distance 1 meter
- Maximal working distance target size dependence

#### Standard Scope of Supply

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

#### **Optional**

- Mechanical and Electrical Accessories
- Analog Output: 0...20mA or 4....20mA or 0-10V or K type T/C
- Extra Cable Lengths
- RS422, USB, Bluetooth

### **Applications**

- Aluminium Extrusion
  - Profiles
  - Billets

- Aluminium Rolling
- · Aluminium Forging
- Cooper & Brass Billets
- · Cooper & Brass Forging
- Aluminium Continuous Casting

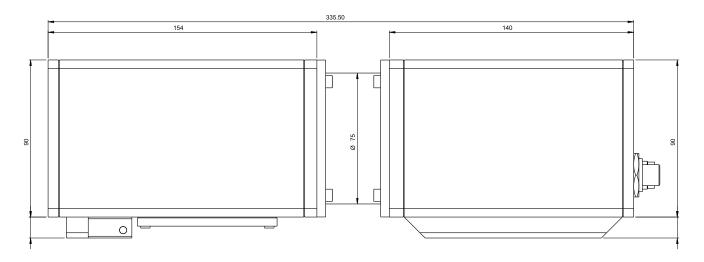
# Technical Specifications

Model	Specification	
Emissivity	0.1 -1.0	
Response Time	0.1 - 1.0 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, K Type T/C	
Digital Output	RS-232, RS-422, USB, Bluetooth	
Digital Display	P110	
Pyrometer Scanner Overall Dimensions	355 x 110 x 105 mm	
Pyrometer Scanner Weight	3.4Kg	
Operating temperature range	0°C +50°C	
Storage temperature range	-20°C +70°C	
Humidity	Unlimited for the sensor-head	

# Spot Sizes

	AST A4-S-EX			
Measuring Distances(mm)	Spot Sizes(mm) 170 - 550°C	Spot Sizes(mm) 200 - 650°C	Spot Sizes(mm) 250 - 870°C	Spot Sizes(mm) 300 - 1150°C
900	10	10	7	2.5
1400	15	15	7.5	3.75
1900	20	20	10	5
2900	30	30	15	7.5
4900	50	50	25	12.5

# **Pyrometer Drawing**



## **Accessories**





Misgav Industrial Park, Misgav 2017400 Israel Ph.: +972-4-9990025, Fax: +972-4-9990031

E-mail: info@accuratesensors.com www.accuratesensors.com

