

AST E 250/450

Highly Accurate Digital pyrometer with Extended Optical Head, Inbuilt LCD and Keypad for Parameterization

CE 250...3200°C

The **AST E 250 & AST E 450** is digital pyrometers with extended optical head for non contact temperature measurement on metals, ceramics, graphite etc between 250°C to 3200°C. The sensor head is unaffected by electromagnetic interferences (e.g. induction). The pyrometer is equipped with a display which shows in measuring mode the current temperature. Additionally parameters can be read and changed via integrated keys.

AST E 250/ E450 are optionally provided with USB 2 output for communicating with PC. The pyrometer can be powered through USB port. In this case no external power supply is required for digital output. Analog output is 4...20mA or 0...20mA or 0...10V user selectable)



Serial interface RS 485 is available as optional.

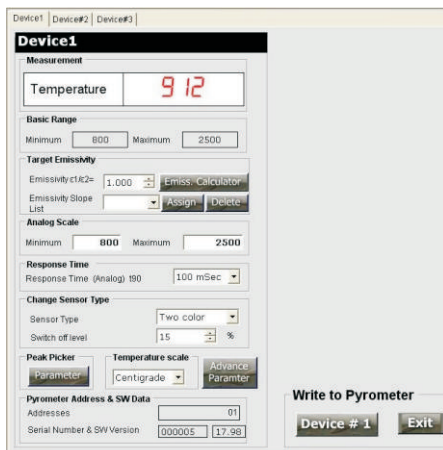
- ❖ **Wide temperature range (250...3200°C)**
- ❖ **In built LCD**
- ❖ **Parameter can be adjusted via integrated keypad or interface.**
- ❖ **Rs485 Isolated (optional),**
- ❖ **USB 2.0 (Optional)**
- ❖ **Relay output (Optional)**

Standard Scope of supply

- ❖ AST E 250 / E 450 with LCD Display and keypad for parameterizing, Sensor head with 3 mtr cable.

Optional

- ❖ Sensor head extension cable (upto 15mtr)
- ❖ Relay interface: one optically isolated relay, 60 V DC/ 42 VACRMS, 0.4 A
- ❖ RS 485 Interface and software for parameterizing/data logging
- ❖ USB output with PC Cable and software for parameterizing/data logging



We Measure Temperature Accurately even in extreme Conditions

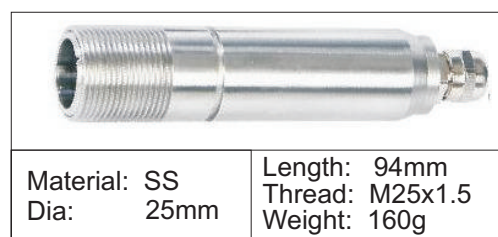
TECHNICAL SPECIFICATION

Model	AST E 250	AST E 450
Measured Temperatures Range Sub Range Adjustable	250 °C - 1300 °C	600 °C -1900°C
	350 °C - 1800 °C	750 °C -3200°C
	Analog output sub range adjustable	
Spectral Range, μm	1.6μm	1μm
Photodetector Type	InGaAs	Si
Distance to spot size ratio	40:1	80:1
Response Time	10msec. Adjustable upto 10S	
Accuracy & Repeatability	+/-0.3% of the measured value + 1°C	
Emmissivity	0.1 1 adjustable	
Operating temperature range	Electronic and optical head 0.....70 °C	
Analog Output	4-20mA or 0-20mA or 0-10V User selectable	
Digital Output (Optional)	RS 485 (ISOLATED), USB 2	
Relay Output (Optional)	Relay output with hysteresis 60 VDC/ 42 VACRMS, 0.4 A	
Power Supply	24 V DC	
Resolution	0.1 K	
Storage temperature	-20 to +70 °C	
Dimensions & weight	115 x 65 x 55 (L x W x D) & 320g	
Adjustable Parameters via Keypad/software	Emissivity, Analog output, Address, Response time, Peak picker, Analog output sub range,	

Optical Specifications

Sensor Head Type	Working Distance (mm)	AST E 250	AST E 450
		Spot Size (mm)	Spot Size (mm)
CF	100	2.5	1.3
	200	5	2.5
	300	7.5	3.8
SF	600	15	7.5
	900	22.5	11.3
	1200	30	15

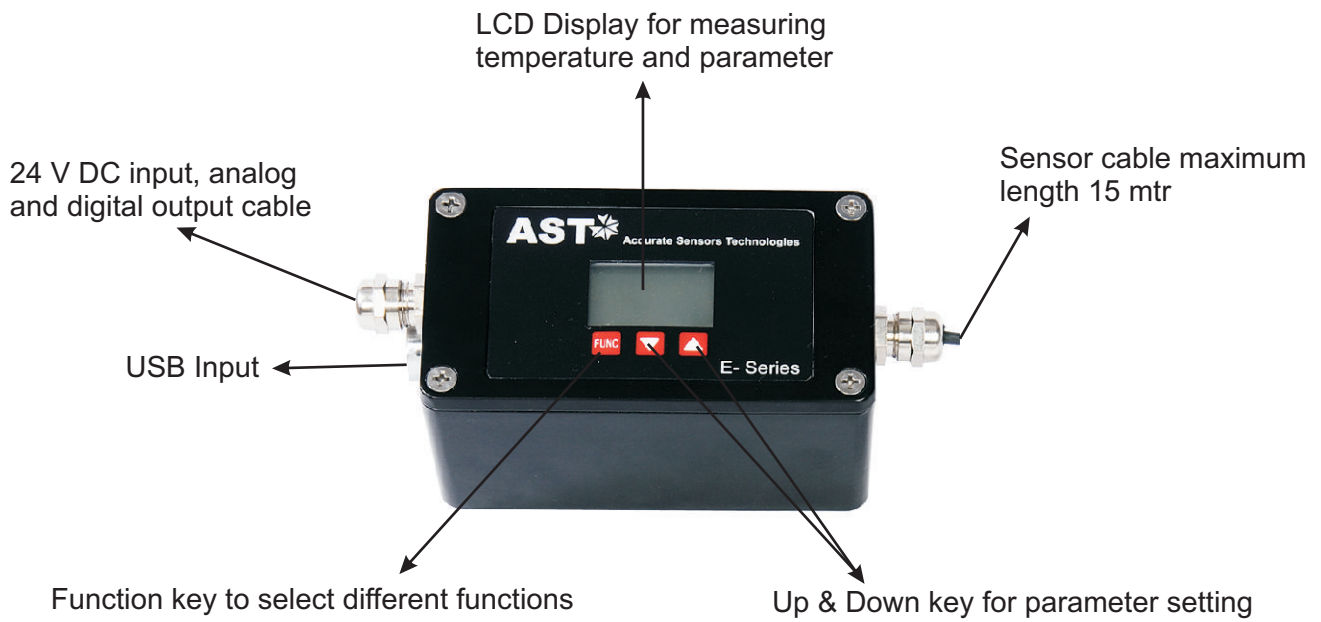
Sensor Head Details



Optional Accessories

- ❖ Air purge Unit for Sensor Head
- ❖ Adjustable mounting clamp for Sensor Head
- ❖ Power supply Unit (SMPS)
- ❖ RS 485 to RS 232 Converter
- ❖ USB Cable
- ❖ Connection Cable

SETTING AT THE INSTRUMENT



ACCESSORIES



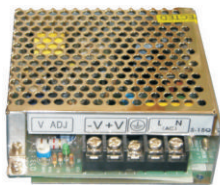
Water Cooling Jacket & Air purge unit for optical head-II
Reference No. 8000 - 01



Air purge unit for optical head-II
Reference No. 8200 - 01



Adjustable Mounting for optical head-II
Reference No. 8200 - 03



Power supply input 110/230 AC
Output 24 V DC, 0.75Amp
Reference No. 9000 - 02



Converter, RS 485 to RS 232
Reference No. 9000 - 03

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