

Accurate Sensors Technologies

AST E 250/450

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

(€ 250....3200°C

The **AST E 250 & AST E 450** is digital pyrometers with extended optical head and 5 core cable for noncontact temperature measurement on metals, ceramics, graphite etc between 250°C and 3200°C.

The optical head is unaffected by electromagnetic interferences (e.g. induction). The pyrometer is equipped with a display (optional) which shows in measuring mode the current temperature. Additionally all parameters can be read and changed via integrated keys.

AST E 250 / E 450 are provided with USB 2 connector with cable. The pyrometer can be powered through USB port of the laptop computer. In this case no external power supply is required.

Analog output is 4...20mA (0...20mA / 0...10V / 0....5V 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**



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 extention cable (upto 15mtr)
- Relay interface: Two optically isolated relays, 60 VDC/ 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 350 °C - 1800 °C | 600 °C -1900°C 750 °C -3200°C | |
| 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 | | |
| Emmisivity | 0.1 1 adjustable | | |
| Operating temperature range | Electronic and optical head 070 °C | | |
| Analog Output | 4-20mA or (0-20mA / 0-10V / 0-5V) Optional | | |
| Digital Output (Optional) | RS 485 (ISOLATED), USB 2 | | |
| Relay Output (Optional) | 2 Relay output with Hysteresis | | |
| 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) | | |
| Protection class | IP 65 | | |
| Adjustable Parameters via Keypad/software | Emissivity, Analog output, Address, Response time, Peak picker, Temperature Sub Range, | | |

Optical Specifications

| Sensor Head Type | Working Distance (mm) | FOV 80:1 | FOV 40:1 |
|---------------------|--------------------------|---------------|---------------|
| | | Spot Size(mm) | Spot Size(mm) |
| CF | 100 | 1.3 | 2.5 |
| | 200 | 2.5 | 5 |
| | 300 | 3.8 | 7.5 |
| SF | 600 | 7.5 | 15 |
| | 900 | 11.3 | 22.5 |
| | 1200 | 15 | 30 |

Sensor Head Details



Optional Accessories

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

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Misgav Industrial Park, Misgav 20174 Israel Ph.: +972-4-9990025, Fax: +972-4-9990031 E-mail: technical@accuratesensors.com Website: www.accuratesensors.com

