

**AST EL50** is a digital pyrometer with extended sensing head in 4 wire technology for non-contact temperature measurement between 0°C and 800°C.

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

AST EL50 is provided with USB output and PC software. The pyrometer can be powered through USB port. In this case no external power supply is required +24 V DC requires for Operation of Analog Output, RS - 232 & RS - 485 & Relay Output.

Analog output is 4...20mA, 0...20mA, 0...10V, thermocouple type "K" or "J" (user selectable) via keypad or software. Serial interface RS-485 & RS-232 is available as optional. The provided software can be used for remote parameter setting and data logging.

## AST EL50



### Standard Scope of Supply

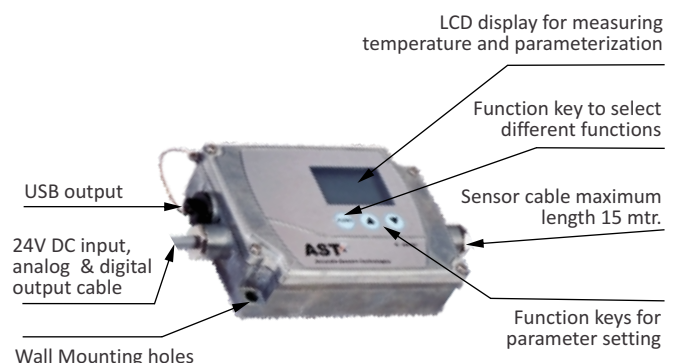
**AST EL50** with LCD Display and keypad for parameterizing, sensor head with 3 m cable, USB Output, 1 Relay Output, USB Cable, Analog output 4...20mA, 0...20mA, 0...10V, thermocouple type "K" or "J" (user selectable).

### Technical Specifications

| Model   | AST EL50  |
|---|---|
| Measured Temperatures Range<br>(Analog output sub range adjustable) | 0°C - 800°C   |
| Spectral Range  | 8.....14µm  |
| Photodetector Type  | Thermopile  |
| Distance to spot size ratio   | 2:1 or 15:1 (To be specified while ordering)  |
| Response Time   | 20msec adjustable upto 10s  |
| Accuracy  | +/-1.5% of temperature reading or +2°C<br>(Sensor head should be at constant ambient temperature) |
| Repeatability   | 0.1% of reading in °C ±1°C  |
| Emmissivity   | 0.1 ..... 1 adjustable  |
| Operating Temperature Range   | Electronic box 70°C<br>Sensor head upto 120°C   |
| Analog Output   | 4-20mA, 0-20mA, 0-10V<br>Thermocouple Type "K" or "J" user selectable                             |
| Digital Output  | USB 2.0<br>RS - 485 & RS - 232 (Optional)   |
| Relay Output  | 1 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   | 112.5 x 82.5 x 33 (L x W x D), 600g   |
| Protection class  | IP 65   |
| Adjustable Parameters via Keypad / software                         | Emissivity, Analog output, Address, Response time, Peak picker, Analog output Sub Range.          |

### Optional

- Sensor head extension cable (upto 15 m)
- RS-232 & RS-485 interface card



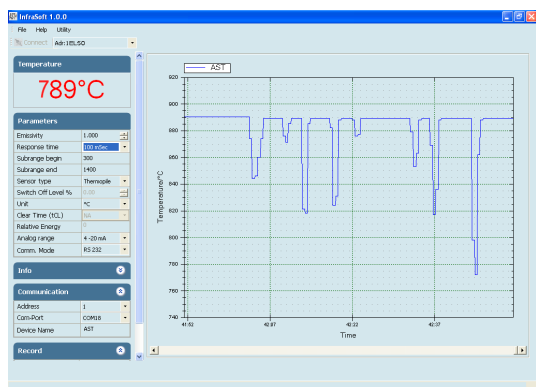
### Features

- Wide temperature ranges (0°C to 800°C)
- in-built LCD
- Parameter can be adjusted via integrated keypad or Software
- User selectable analog output 0/4-20mA, 0-10V, thermocouple type "K" or "J"
- RS-232 & RS-485 Isolated (Optional)
- USB 2.0
- Relay output

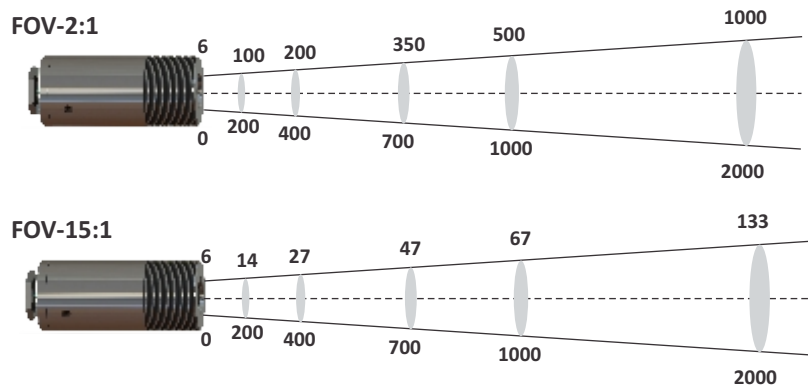
### Applications

- Plastic, Rubber & Ceramic
- Paper
- Textile
- Fluids
- Oxide/Painted metal surface,
- Wood and Glass Industries

## Software "Infrasoft"

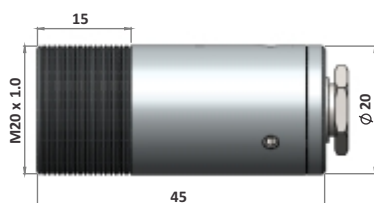


## Spot Size

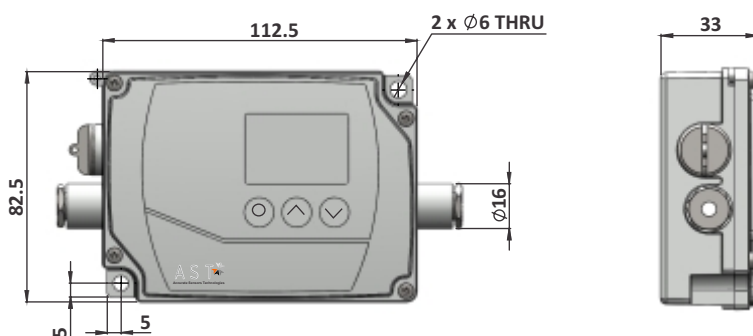


\*All Dimensions are in "mm".

## Drawings

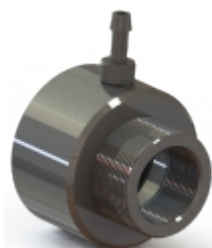


Sensing Head



Electronics

## Accessories



Air Purge Unit For Optical Head  
(Reference No. - 8300-03)



Adjustable Mounting for Optical Head  
(Reference No. - 8300-04)



Converter RS-232 ↔ RS-485  
(Reference no: 9000-03)



Power Supply Unit  
(Reference no: 9000-02)

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