• EL50

-20°C to 800°C

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Features

- Power Supply (12V to 28V DC with reverse polarity protection)
- Sensor head withstands ambient temperature upto 120°C
- Spectral range 8 µm...14 µm
- Wide temperature ranges (0°C to 800°C)
- Inbuilt LCD Display and Keypad for parameterisation
- Fast response time within milliseconds
- Analog output 4...20mA, 0...20mA, 0...10V, Thermocouple type "K" or "J" (user selectable)
- USB 2.0 Digital output
- RS-232/RS-485 Serial interface card
- Relay output
- User friendly PC software for communication

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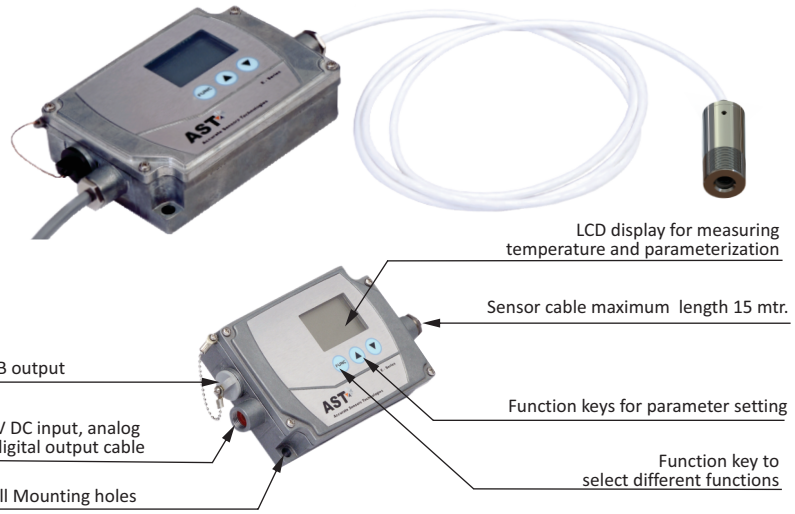
Standard Scope of Supply

- Pyrometer with LCD Display
- Keypad for parameterizing
- Extended Sensor head with 3 mtr cable
- Analog output like 4...20mA, 0...20mA, 0...10V, Thermocouple type "K" or "J" (user selectable)
- USB2.0 Digital output, USB Cable
- Relay Output
- Calibration certificate, Software & Operation manual

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Optional

- Mechanical and Electrical Accessories
- RS-232 / RS-485 interface card
- Extra Sensor Head Extension Cable Lengths

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Applications

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

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CE

Highly Accurate Digital Pyrometer with Extended Sensor Head, Inbuilt LCD & Keypad for Parameterization

LCD display for measuring temperature and parameterization

Sensor cable maximum length 15 mtr.

USB output

24V DC input, analog & digital output cable

Wall Mounting holes

Function keys for parameter setting
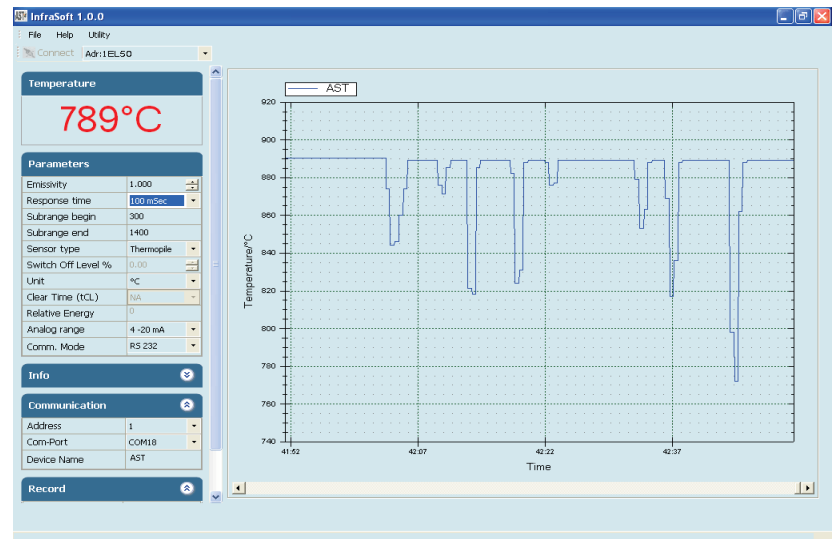
Function key to select different functions

El50 is an economic digital IR Pyrometer from E series with extended sensing head in 4 wire technology for non-contact temperature measurement between -20°C to 800°C.The sensor head is unaffected by electromagnetic interferences. The pyrometers are specially designed in a such way that sensor head can withstand ambient temperature upto 120°C easily.

The pyrometer is equipped with a Inbuilt 4 digit LCD display which offers many signal processing features. The electronic box with integrated Keypad helps in setting parameters like Emissivity, Analog Sub range, Set point,Hysteresis (Hyst), Analog Output, Unit of temp(°C or F), Response Time, Peak Picker and Sensor address etc.

El50 is provided with USB 2.0 output and PC software. The pyrometer can be powered through USB port. In this case no external power supply is required. 24 VDC is required 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" (userselectable) via keypad or software. RS-232/RS-485 Serial interface card is available as optional.
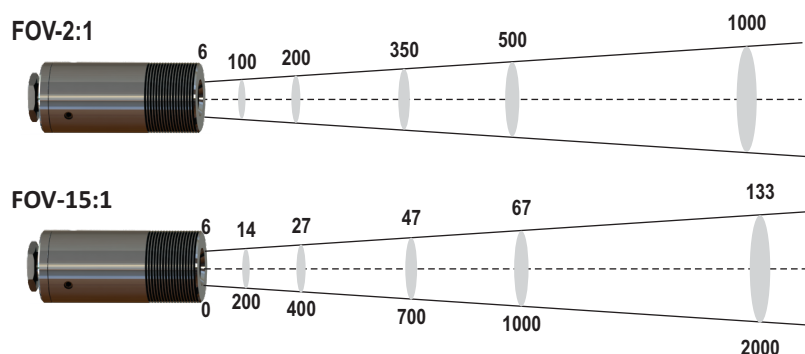
Software "Infrasoft"

We measure accurate temperature in extreme conditions

Technical Specifications

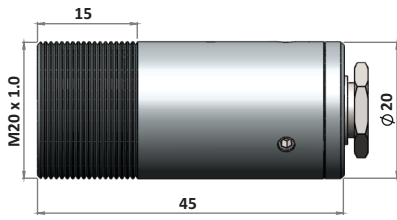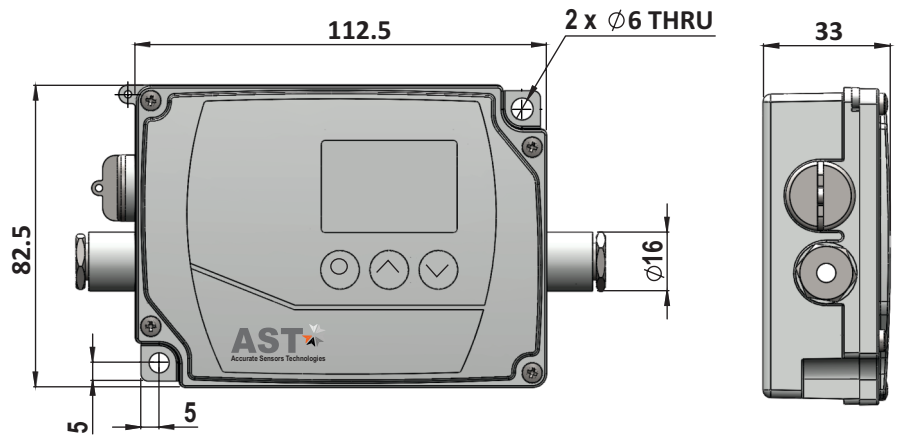| Model	EL50
Temperature Range (Analog sub-range adjustable)	-20°C - 800°C
Spectral Range	8...14 µm
Photodetector Type	Thermopile
Distance to Spot Size Ratio	2:1 15:1 (To be specified while ordering)
Emissivity (ε)	0.1....1.2 adjustable
Response Time	20 msec adjustable upto 10 sec
Accuracy	± 1% of the measured value or 3°C whichever value is greater (The sensor head must be at constant ambient temperature for a minimum of 15 minutes)
Repeatability	0.3% of reading in °C + 1°C
Analog Output	0-20mA, 4-20mA, 0-10V, Thermocouple Type "K" or "J" (User selectable)
Digital Output	USB 2.0 RS-232/RS-485 interface card (Optional) *At a time only one digital output possible
Operating Temp. Range	Electronic Box upto -20°C to 70°C Sensor head upto 120°C
Storage Temp. Range	-20°C...70°C
Relay Output	Relay Output with hysteresis 60V DC/42V AC RMS,0.4A
Adjustable Parameters and Features via Software	Emissivity, Response Time, Clear Time (Peak Picker), Analog Output, Sub Range, Unit Of Temperature (°C/°F), Communication mode(Comm.mode), Record feature etc.
Adjustable Parameters and Features via Keypad	Emissivity, Setpoint, Hysteresis (Hyst), Analog Sub Range, Analog Output, Unit of temperature, Sensor address, Response Time, Clear Time (Peak Picker) etc.
Power Supply	12V to 28V DC with reverse polarity protection
Power Consumption	Max 2.5 watt
Protection Class	Ip65
Housing	Sensor head-Stainless Steel; Electronic Box: Zinc
Isolation	Power supply, *Digital output and Analog output are galvanically islolated against each other * Not applicable for USB 2.0 digital output
Operating Humidity	10-95%, Non-Condensing Conditions
Weight & Dimensions	600g, 112.5mm x 82.5mm x 33mm (L x W x H)

Spot Sizes

FOV-2:1

FOV-15:1

*All Dimensions are in "mm".

We measure accurate temperature in extreme conditions

Pyrometer Drawing

112.5

2 x ⌀6 THRU

33

15

M20 x 1.0

⌀20

45

82.5

⌀16

5

5

AST
Accurate Sensors Technologies
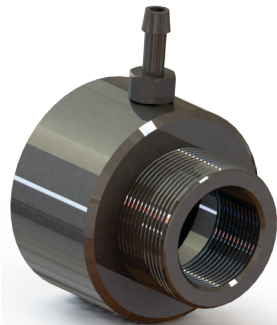
Sensing Head

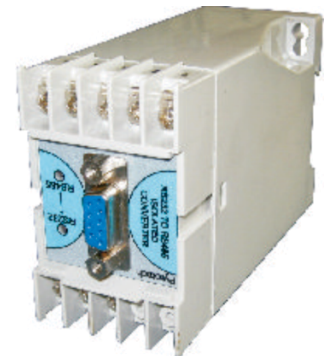**Electronics**

*all dimensions in mm

Accessories

Air Purge Unit For Sensor Head (Reference No. - 8300-03)	Adjustable Mounting for Sensor Head (Reference No. - 8300-04)	Converter RS-232 ↔ RS-485 (Reference no: 9000-03)

Power supply Input 110/230V AC
Output 24 V DC, 0.7Amp.
(Reference No. 9000 - 02)