

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

**FOR HOT ENVIRONMENT UPTO 250°C**

**°C 0°C to 800°C**

**EL50-H+**

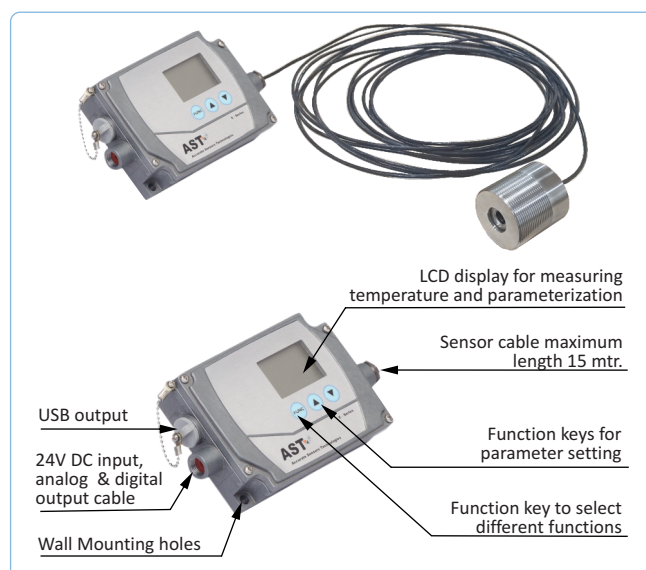
**EL50-H+** is a digital Pyrometer in economic range with extended sensor head in 4 wire technology, for non-contact temperature measurement between 0°C to 800°C. The sensor head is unaffected by electromagnetic interferences. The pyrometer sensor head is specially designed to withstand ambient temperature upto 250°C without cooling.

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, Relay, Set point, Hysteresis (Hyst), Analog Output, Unit of temp(°C or F), Response Time, Peak Picker and Sensor address etc. Analog outputs options available are 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.

**EL50-H+** 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 V DC is required for operation of Analog Output, RS - 232 & RS - 485 & Relay Output.

### Technical Specifications

Model	EL50-H+
Temperature Range(Analog sub-range adjustable)	0°C....800°C
Spectral Range	8...14 μm
Photodetector Type	Thermopile
Distance to Spot Size Ratio	15:1
Emissivity (ε)	0.1....1.2 adjustable
Response Time	60 msec adjustable upto 10 sec
Accuracy	±3% or ±3.0°C(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 70°C Sensor head upto 250°C
Storage Temp. Range	-20°C...70°C (Electronics), -20°C...250°C (Sensor Head)
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, Analog Scale (Sub Range), Unit Of Temperature (°C/°F), Communication mode(Comm. mode), Record feature etc.
Adjustable Parameters and Features via Keypad	Emissivity, Relay, Setpoint, Hysteresis (Hyst), Analog Sub Range, Analog Output, Unit of temperature, Sensor address, Response Time, Clear Time(Peak Picker) etc.
Power Supply	12V DC to 28 V 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 isolated against each other * Not applicable for USB 2.0 digital output
Operating Humidity	10-95%, non condensing conditions
Weight & Dimensions	600g, 112.5mmx82.5mmx33mm(L x W x H)



### Features

- Power supply (12V DC to 28 V DC) with reverse polarity protection
- Sensor head can withstand ambient temperature upto 250°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 like 4...20mA, 0...20mA, 0...10V, Thermocouple type "K" or "J" (user selectable)
- USB2.0 Digital output and RS-232/RS-485 Serial interface card
- Relay output
- User friendly PC software for communication

### Standard Scope of Supply

- Pyrometer with LCD Display
- Keypad for parameterizing,
- Extended sensor head with 3m cable
- USB 2.0 Digital output, USB Cable
- Relay Output
- Analog output 4...20mA, 0...20mA, 0...10V, Thermocouple Type "K" or "J" (user selectable)[Thermocouple outputs J & K to be specified while ordering]
- Calibration certificate, Software & operation manual

### Optional

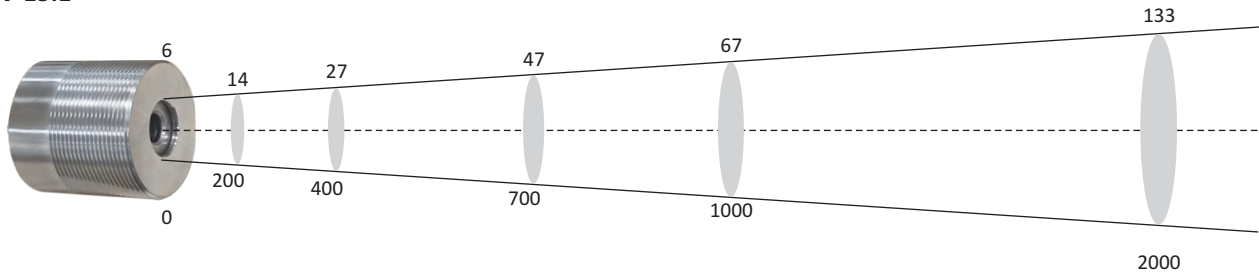
- Mechanical and Electrical Accessories
- RS-232 & RS-485 serial interface card
- Extra Cable Lengths

### Applications

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

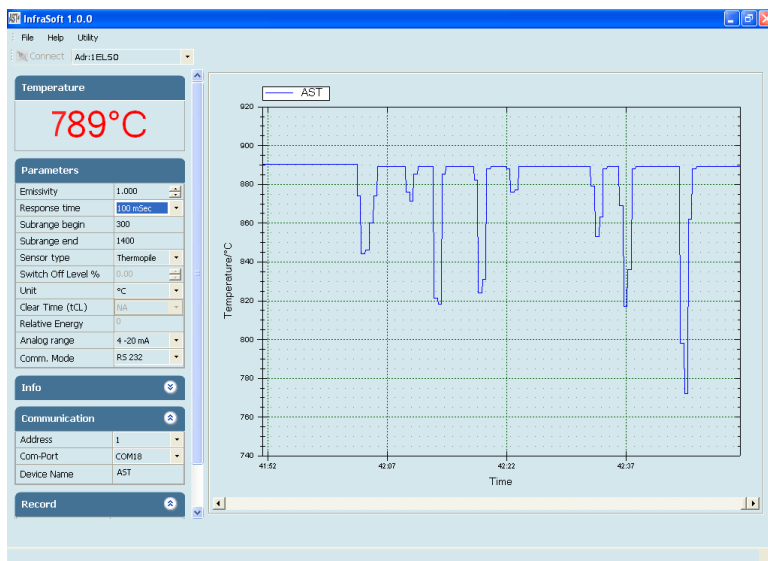
## Spot Sizes

### FOV-15:1



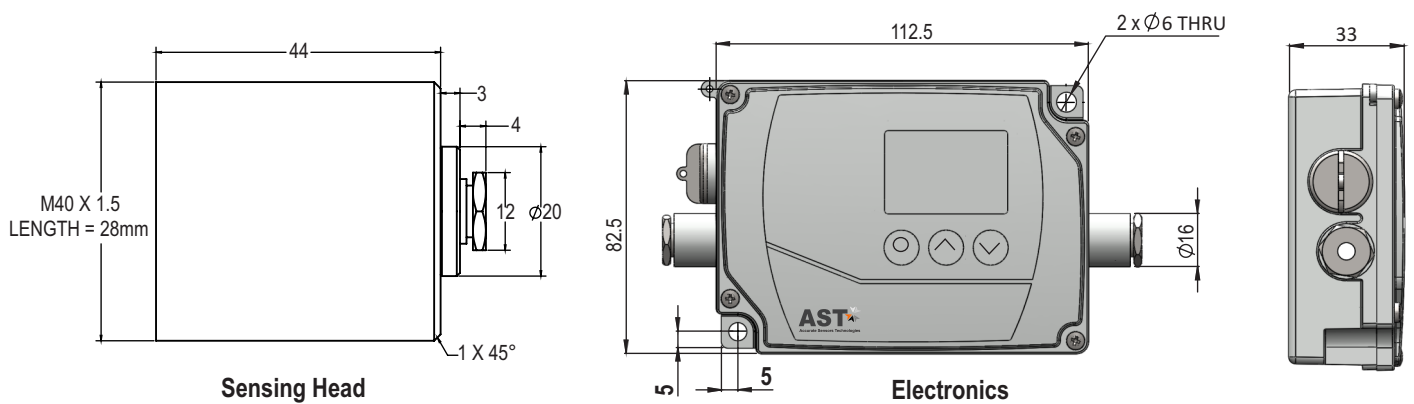
\*All Dimensions are in "mm".

## Software "Infrasoft"



AST "Infrasoft" software is under standard scope of supply. It offers possibilities of parameter setting, view real time graph, offline graph and to evaluate measuring data. Communication between the pyrometer and the software is implemented via a cable connected between the pyrometer and the PC serial port.

## Pyrometer Drawing



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