

Highly Accurate On line Infrared Non-contact Pyrometer With fibre optic cable for Glass Industry

CE 600°C to 1800°C

450 G-2

450 G-2 is specially designed highly accurate digital IR Fibre Optic pyrometer which provides high performance and low maintenance of non contact temperature measurement of molten glass in Glass industries for melting tank, Fore hearth, Feeder and Working end. The rugged fiber optic cable is designed to withstand high ambient temperature in glass industry without water cooling. Emissivity, Subrange, Response time can be preset ex-works or adjusted through software. This enables the instruments to be adapted to various measuring tasks. **450-G2** IR Pyrometer has solid stainless steel housing which provides high operational safety in rough industrial environments. The particular IR Pyrometer model has small optical head which makes it easier to reach harshest of locations



Technical specifications

| Model | 450 G-2 |
|-------------------------------------------------|--------------------------------------------------------------------------|
| Temperature Range (Analog sub-range adjustable) | 600°C to 1800°C |
| Spectral Range | 1 µm |
| Photodetector Type | Si |
| Distance to Spot Size Ratio | 100:1 (Min Spot Size 16mm) |
| Emissivity (ε) | 0.05.....1.0 adjustable via DIP switch |
| Response Time | 250 msec adjustable upto 10 sec |
| Accuracy | ± 0.3% of measured value or ± 3°C whichever is greater |
| Repeatability | ± 0.2% of reading in °C + 1°C |
| Analog Output | 4 - 20mA |
| Digital Output | USB 2.0 |
| Operating Temp. Range | Pyrometer 0°C....70°C Optical head and Fibre Optic max 250°C |
| Storage Temp. Range | -20°C...70°C |
| Adjustable Parameters and Features via Software | Response Time, Analog Scale (Sub Range), Unit Of Temperature (°C/°F) etc |
| Power Supply | 24 V DC |
| Power Consumption | Max 0.5 watt |
| Protection Class | IP65 |
| Housing | Optical head-Stainless Steel; Electronic Box: Aluminium |
| Operating Humidity | 10-95%, non condensing conditions |
| Weight & Dimensions | 0.500 Kg 112.5mmx82.5mmx33mm(L x W x H) |

Features

- Two Wire Designed IR Pyrometer with fibre Optics
- Temperature measurement from 600°C...1800°C
- Spectral range 1.0 µm
- Analog Output 4-20mA
- USB 2.0 Digital output
- Highly accurate 0.3% of measured value
- Fast response time of 250 msec
- Fibre optic withstand ambient temperature upto 250°C
- Very good stability
- User friendly PC software

Standard Scope of Supply

- Two Wire Pyrometer with 5mtr Long heavy duty Fibre optic cable in SS conduit
- Optical head
- Analog Output 4...20mA
- USB 2.0 digital output
- 1.5 mtr. long connection cable with connector
- Calibration Certificate, PC software and operation manual

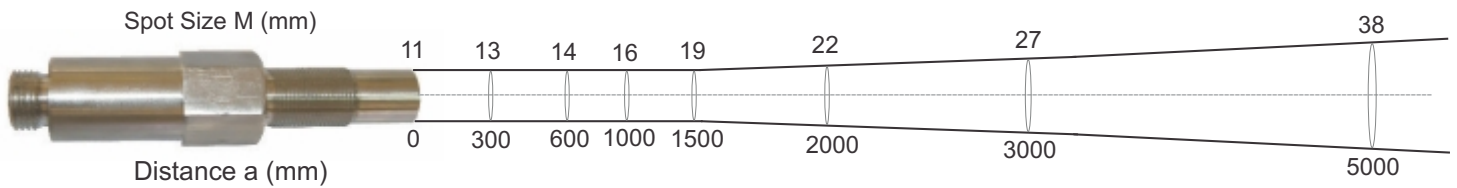
Optional

- Extra cable lengths
- Mechanical and Electrical Accessories
- USB cable

Applications

- Furnace Crown
- Working end
- Feeder
- Fore hearth
- Furnace sidewall

Spot Sizes

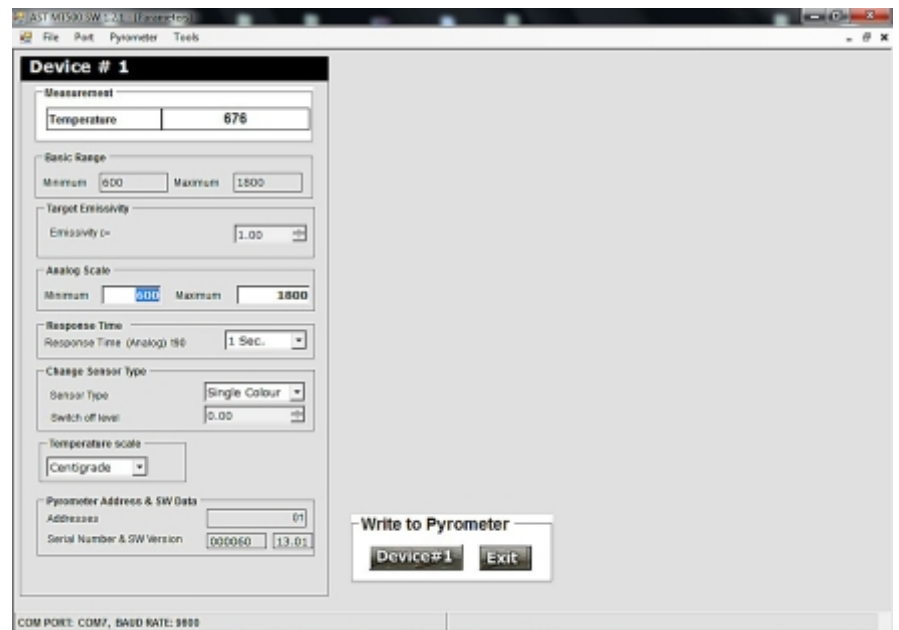


Software "MT500"

AST "MT500" software is under standard scope of supply. It offers possibilities of connecting two pyrometers simultaneously for parameter setting, Communication between the pyrometer and the software is implemented via a cable connected between the pyrometer and the PC serial port. It comes with record feature and parameter settings features.

Some of the parameters adjustable via software are

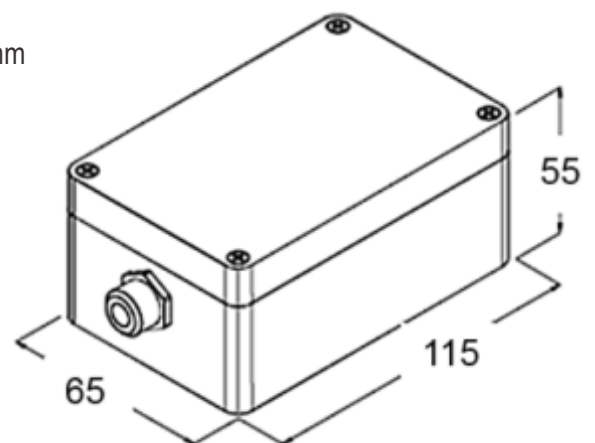
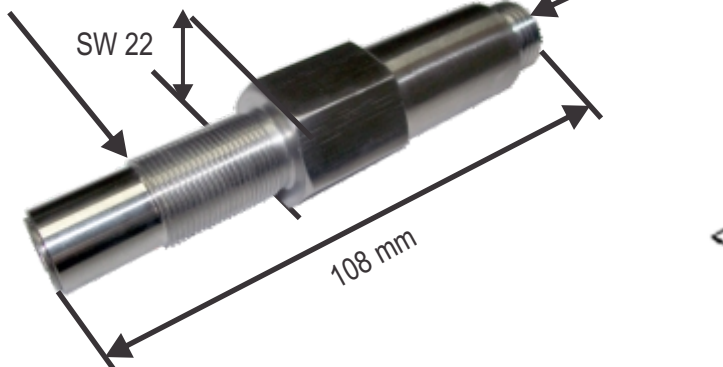
- Emissivity
- Response Time
- Analog Sub Range
- Unit Of Temperature(°C/°F)



Pyrometer Drawing

Optical Head

Thread
M16 x 1 mm









Electronic box

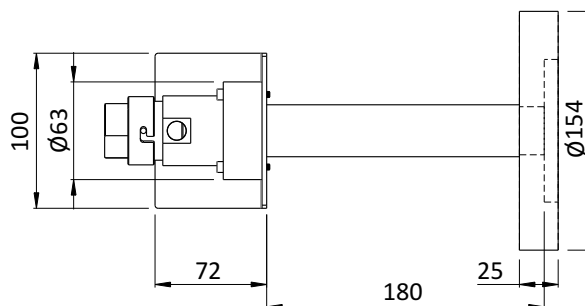
All Dimensions in mm

We measure accurate temperature in extreme conditions

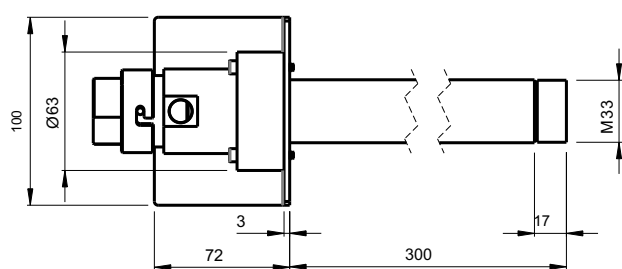
Accessories

| | | |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <p>Air purge unit with sighting tube Reference No. 8100 - 01</p> | <p>Air purge unit with Ceramic tube Reference No. 8100 - 02</p> | <p>Air purge with Mounting flange Reference No. 8100 - 03</p> |
|  |  |  |
| <p>Fiber Optic Cable Reference No. 6000 - 01 (5 Mtr) Reference No. 6000 - 02 (10 Mtr)</p> | <p>Power supply Input 110 / 230 V AC, Output 24 V DC, 0.75Amp Reference No. 9000 - 02</p> | <p>Temperature Indicator with retransmission output 4..20mA Reference No. 9000 - 01</p> |
|  |  |  |

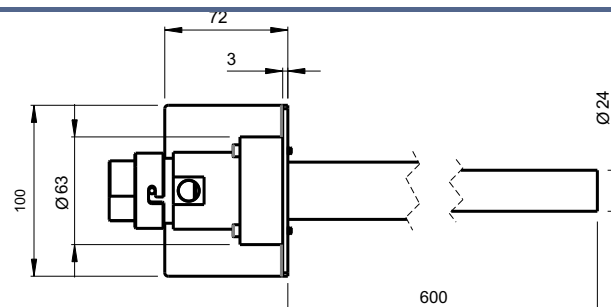
Dimensions



Air Purge Unit with Mounting flange
Reference No. 8100 - 03



Air Purge Unit with Sighting Tool
(Reference No. 8100-01)



Air Purge Unit with Ceramic Tube
(Reference No. 8100-02)

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We measure accurate temperature in extreme conditions