Accurate Sensors Technologies

Highly Accurate Non-contact Pyrometer With Analog Output and Digital Interface **C** € 400°C to 2500°C

AST AL514 model provides the advantage of noncontact temperature measurement of glass surfaces and quartz surfaces. AST AL514 is designed for easy integration into standard 4 wire system. This format combines the high accuracy of digital signal processing with the simple connection. The AST AL514 pyrometer is used for target temperature ranging from 400°C to 2500°C. The electronic assembly is protected by IP65 rugged stainless steel housing.

AST AL514 is provided with USB 2.0 connector with cable. The pyrometer can be powered through USB port. In this case no external power supply is required (+24V DC requires for operation of analog output, laser on and RS-232 / RS-485 output).



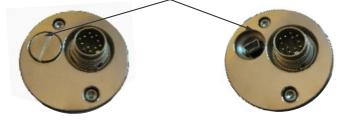
Standard Scope of Supply

AST AL514 with laser targeting light or through the lense sighting, USB output, USB Cable, 5M Connection Cable Head, 1.5M Communication Cable.

Application

- > In glass hardening & bending.
- > Temperature measurement of float glass.

Open Screw For USB 2.0



Features

- Highly Accurate due to digital linearization of the output
- Four wire form with analog output 4 to 20mA or 0 to 20mA or 0 to 10V
- > Serial communication RS-232 or RS-485
- > Response time 60 ms
- Very good stability

We Measure Temperature Accurately even in extreme conditions

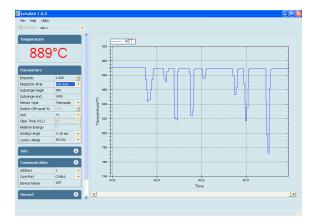
Model	AST AL514
Temperature Range (Analog sub range adjustable)	400°C to 2500°C
Emissivity Range	0.2 1 adjustable
Spectral Range, μm	5.14 μm
Photodetector Type	Thermopile
Response Time	60msec
Accuracy (at ambient temp.23 \pm 5°C) ϵ = 1, response time 1 sec.	< 500°C accuracy is 1.5% of temperature reading ≥ 500°C accuracy is 1% of temperature reading (The instrument must be at a constant ambient temperature for a minimum of 25- 30min)
Repeatability	0.3 % of reading in °C +1°C (whichever value is greater . The instruments mist be at a constant ambient temperature for a minimum of 25-30 min. In Power on Condition)
Distance to Spot size Ratio	50 : 1
Digital output	USB 2.0, RS-232 or RS-485 (Isolatewd)(User Selectable)
Analog output	4-20 mA or 0-20 mA or 0-10 V User selectable
Power	24V DC
Sighting	Laser pilot Light or through the lens sighting.
Laser Power	<1m W
Protection class	IP65
Operating temperature range	0°C to 70°C, 0°C to 200°C (with cooling jacket)
Isolation	Power supply and digital output and analog output are galvanically isolated against each other.
Storage temperature	-20°to 70°C
Dimensions/Weight	Dia.= Ø49.5mm; Length= 118mm / Weight= 0.6 kg
Adjustable Parameters via software	Emissivity, Analog output, Address, Response time, Peak picker, Analog Output sub range

Note:

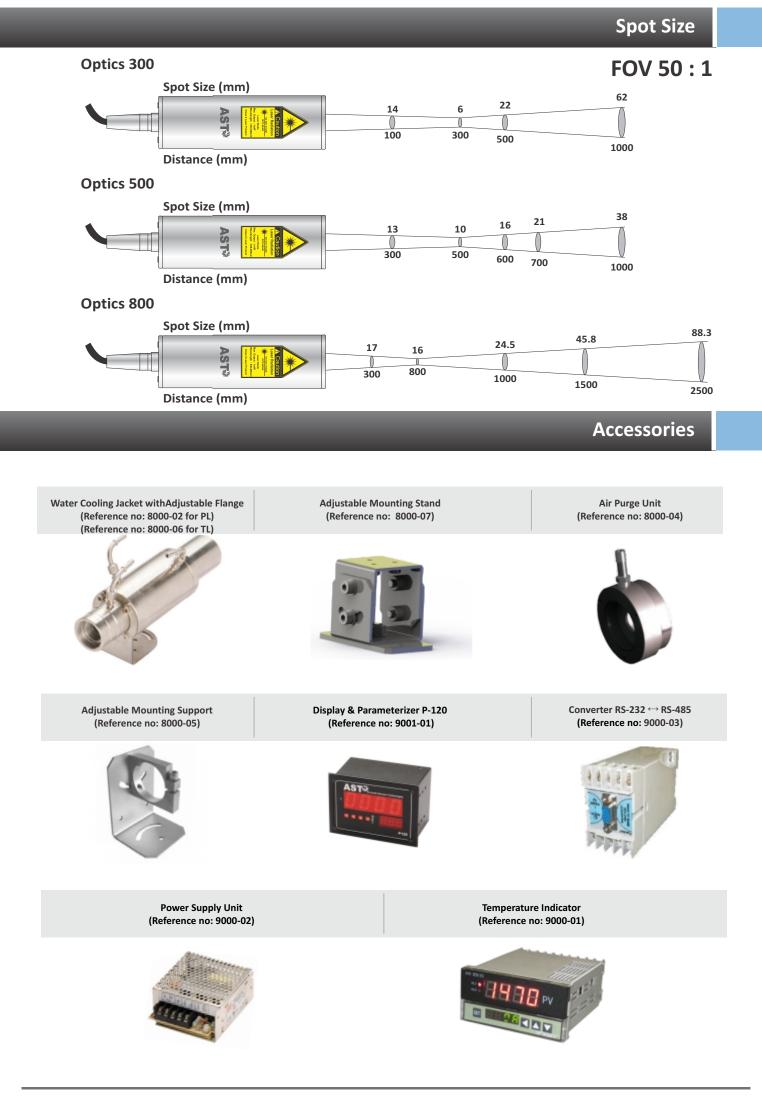
After power supply initialization, keep pyrometer under stable temperature condition for 25-30 minutes for to get above stated accuracy & resolution.

Laser should be used only for targeting purpose. In normal measuring laser should be turned off to get correct measurement.

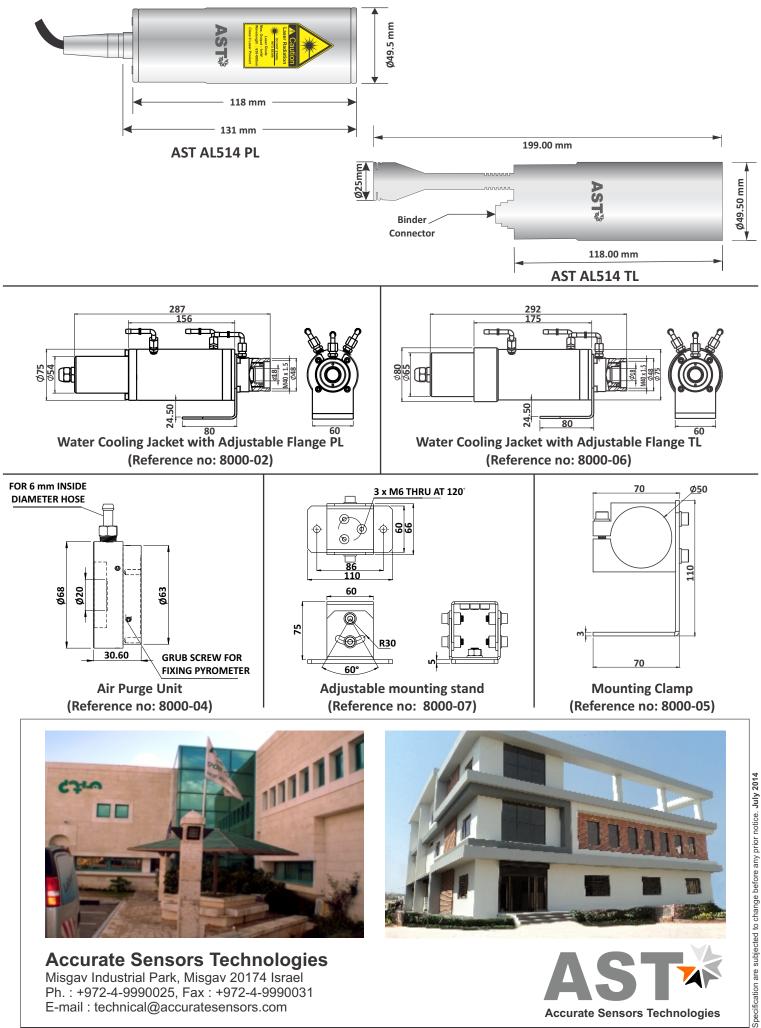
Software "Infrasoft"



- * Emissivity setting
- * Response time setting
- Peak picker setting
- * On-line or Off-line graphs
- Analog output Sub range
- ✤ Data logging



Pyrometer Drawing



www.accuratesensors.com