



ONYX™-MC
MULTI-CHANNEL
OPTICAL FIBER PYROMETERS
PRECISION TEMPERATURE MEASUREMENT
FOR DEMANDING INDUSTRIAL APPLICATIONS





**Accurate,
repeatable,
and reliable**
temperature
measurement

Onyx™-MC MULTI-CHANNEL OPTICAL FIBER THERMOMETERS 700 to 1550 nm

The new Onyx™ series meets the most demanding accuracy and repeatability requirements over a broad temperature range. Based on over 20 years of pyrometry and optical temperature measurement experience in some of the world's most demanding applications, the Onyx series provides measurement precision, repeatability, and reliability for industrial applications.

EXPAND YOUR APPLICATION OPTIONS

Onyx-MC pyrometers are available in a variety of wavelengths, from 700 to 1550 nm. These wavelengths are within the near-infrared range and are ideally suited for a variety of industrial materials and applications, such as measurement of metals, graphites, silicon carbon (SiC), carbon fiber, ceramics, and quartz and sapphire annealing.

- Multi-channel, in-situ, non-contact measurement
- Remote location of electronics for exceptionally harsh conditions
- Separate optical sensors with fiber optic cables



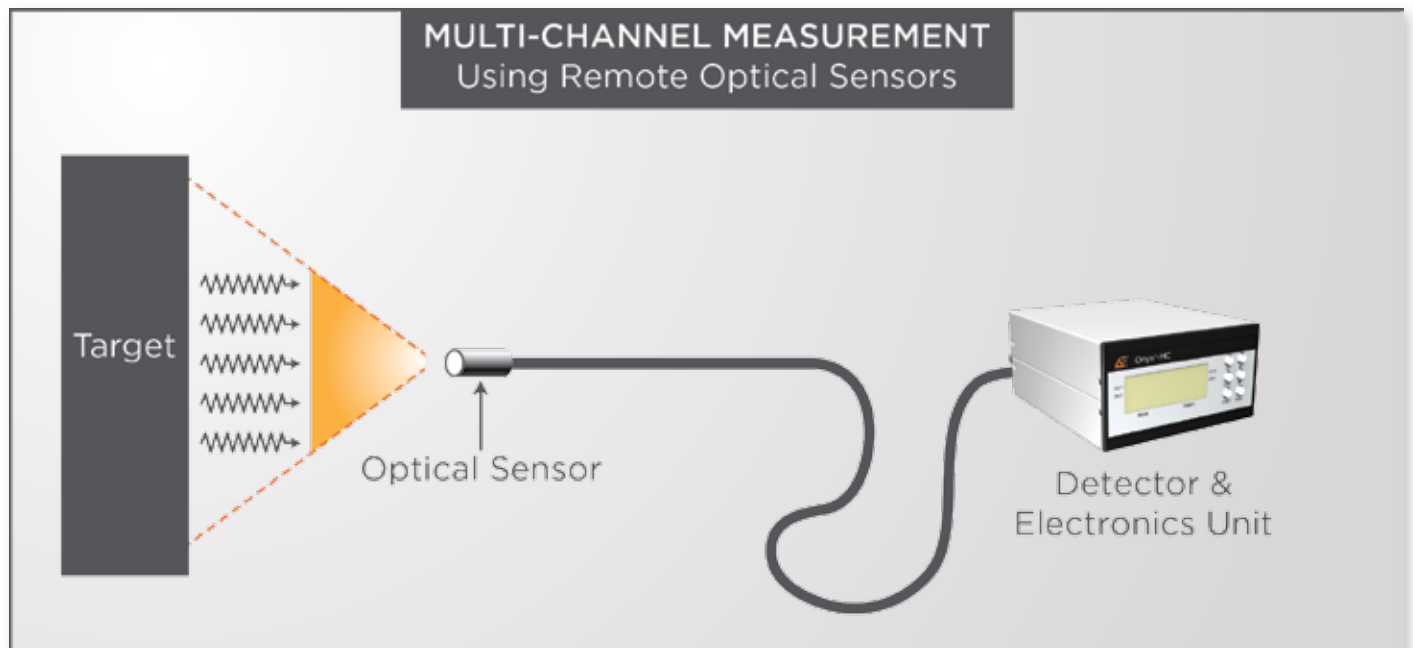


STABILITY ACROSS MULTIPLE MEASUREMENT POINTS

The Onyx-MC pyrometer offers up to four independent channels that can even contain different measurement wavelengths and temperature ranges for different sections of a process. This enables maximum flexibility and cost-effective multi-point measurement for high uniformity.

REMOTE SENSOR/CABLE DESIGN FOR HARSH CONDITIONS OR SPACE CONSTRAINTS

For applications with limited space or exceptionally harsh conditions, independent lensed optical sensors and fiber optic cables deliver the sensor signal, enabling remote location of the measurement detector and electronics.



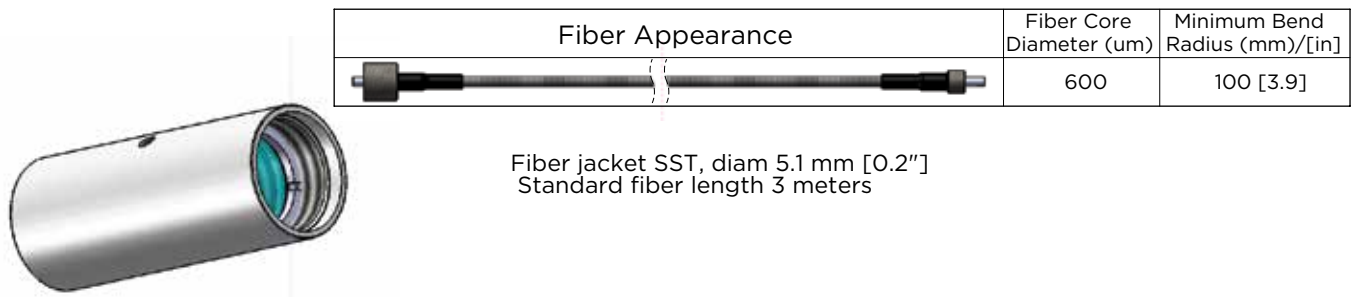
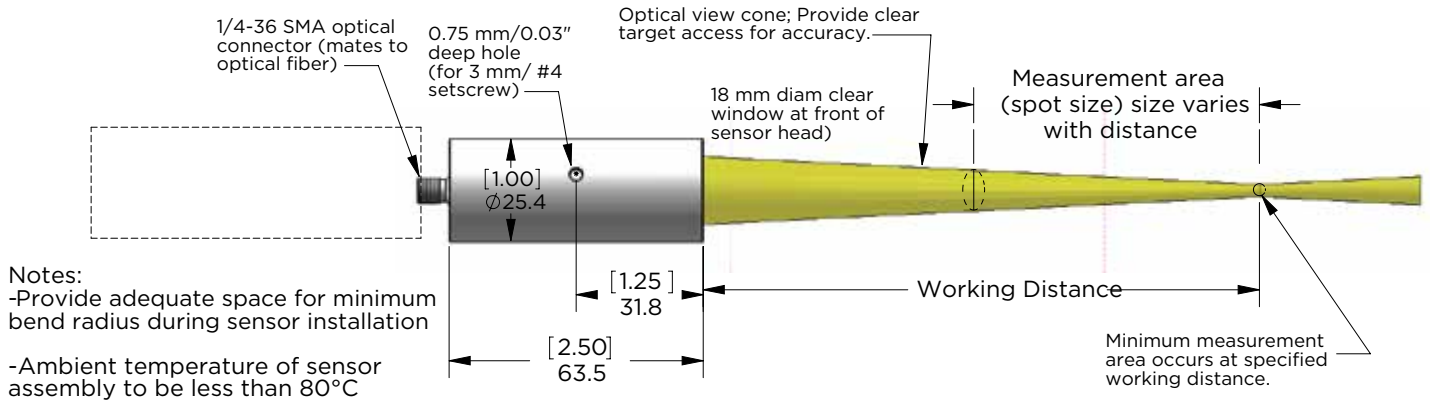
ACCURATE MEASUREMENT REGARDLESS OF ENVIRONMENTAL CONDITIONS

Proprietary ambient-temperature calibration technology ensures ongoing temperature measurement accuracy across a wide range of ambient temperature variation (5 to 40°C) by continuously monitoring each unit's internal temperature and automatically compensating for any temperature variation.

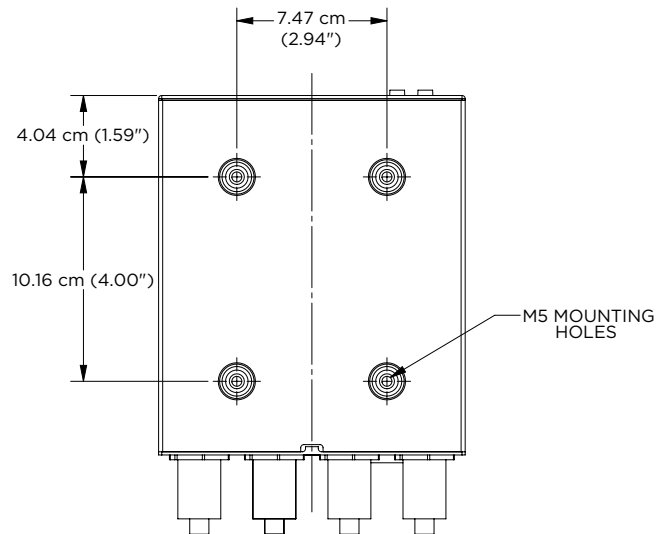
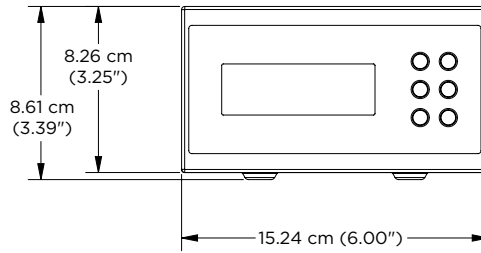
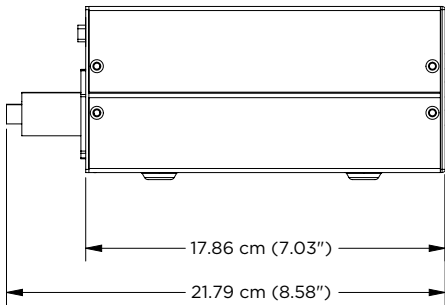


SPECIFICATIONS		ONYX™-MC PYROMETER
Configurations/Channels	1 to 4 channels (temperature); channels individually configurable	
Measurement		
Temperature Range	200 to 2200°C, configurable based on measurement wavelength	
Emissivity	N/A	
Spectral Range	700 to 1550 nm, configurable	
Response Time	Up to 2 kHz, based on channel configuration	
Accuracy	±1.5°C of reading in °C or 4°C	
Resolution	Up to 0.001°C	
Focus Range	150 mm to 2 m	
Communication		
Analog Out	0 to 10 V, 4 to 20 mA	
Digital Interfaces	Standard: RS-232 Available: Modbus®	
Environmental		
Ambient Temperature	0 to 45°C	
Relative Humidity	5 to 85% (non-condensing)	
Storage Temperature	-25 to 85°C	
Electrical		
Power Supply	+24 VDC nominal, +15 to +30 VDC	
Compliance	CE	
Physical		
Display	Internal, 4 x 20 LCD with keypad entry	
Dimensions	219 mm x 152 mm x 89 mm	
Weight	2 kg	
Warranty Period	12 months	

OPTICS



- NOTES:
- Measurements are shown in inches [millimeters], except where noted.
 - Provide adequate space for minimum bend radius during sensor installation.
 - Ambient temperature of sensor assembly to be < 80°C (176°F).



Advanced Energy
 For international contact information, visit advanced-energy.com.