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Fiber Optic Monitor

The FOM-Series fiber optic monitors are designed to be compact and reliable. Fiber optic temperature measurement using the FOM-Series monitors provides accurate readings combined with a user-friendly interface. The FOM-Series boasts a
-80°C to +300°C temperature measurement range as well as ±1.0°C (+/- 0.2°C in relative temperature) accuracy.

Common applications include transformer factories, chemical processing, medical equipment testing (MRI, PETSCAN, NMR), commercial grade microwave heating, food and beverage processing, electric vehicle and battery testing and wood drying.
Fiber optic sensors transfer information to the fiber optic monitor via light that travels through the fiber optic cable. This is quite different compared to traditional sensors that use resistance/voltage to communicate with monitors. Since fiber optic sensors use light the signal is very fast, reliable and is not influenced by outside forces such as EMI, RFI, NMR or microwave radiation.

Features

- **Temperature ranges from -80°C to 300°C**
- **Temperature monitors up to 8 channels**
- **Accuracy ±1.0 °C (+/- 0.2 °C in relative temperature)**
- **Logging capabilities available through USB connectivity**
- **Free software with data logging capabilities**
- **Complete the system with fiber optic sensors**
- **Expandable memory with MicroSD slot (MicroSD card not included)**
- **Case accessory available for easy storage and transportation**
- **RS-485 and USB output with Modbus**
- **Configurable 0-10 V / 4-20 mA with FOM-AOUT accessory**

Specifications

Process Temperature Range	-80 to 300°C (-112 to 572°F)
Ambient Operating Temperature	-40 ° to 55 °C, non-condensing
Accuracy	± 1.0°C (1.8°F)
Temperature Units	°C only (°F selectable in Omega Fiber Optic Sensing software)
Connection Type	ST Connector
Response Time	Typically, 0.2 to 0.5 seconds per channel
Number of Channels	2 through 8
Analog Outputs	Optional external module (4-20 mA and 0-10 V, software selectable), with 8 programmable outputs
Supply Voltage	5 VDC
Display Resolution	0.1°C
Probe Compatibility	All Omega fiber optic probes, most competitive GaAs probes
Portability Option	Rechargeable battery (FOM-H201 version)
Dimensions	4.9" x 7.1" x 2.7" (125 mm x 180 mm x 69 mm)
Weight	FOM-L201: 450 g (15.8 oz); FOM-H201: 600 g (21.1 oz)
Memory	MicroSD external memory slot (up to 2 TB)

Ordering Example: FOM-L201-6: 6-Channel -80 to 300°C Fiber Optic Monitor, USB-powered.