L201 - Rugged Fiber Optic Temperature Monitor

- Rugged, Compact Design
- 2 to 8 Channels, Expandable
- Plug and Play
- Best in class EMI, ESD Immunity
- Software designed to be interfaced with other testing platforms

Rugged design, designed for reliability, multichannel fiber optic temperature monitor for Industrial and Laboratory applications.

Product Summary

The Rugged Monitoring L201 is a compact design, designed for reliability to operate in extreme EMI, RFI, Microwave and high voltage environments. The L201 Fiber optic monitor combines reliability and user friendly interface in the monitor and software. It is a multi-channel fiber optic temperature monitor with precision measurement for Industrial and Laboratory applications. The L201 has a measuring range from -271 °C to +300 °C. The system offers complete immunity to RFI, EMI, microwave radiation, and High Voltages making it an optimal choice for environments where the limitations of conventional temperature sensors/ monitors impact usage in extreme conditions. The system is based on proven GaAs technology and designed for Plug and Play operation.

The L201 is designed to collect data and easy to integrate into existing systems through serial communication like RS-485 or analog outputs like 0-10 V / 4-20 mA. The L201 monitor comes with Rugged Connect software which is designed with the needs of Test platform or Industrial Process monitoring integration needs. It has the data integration capability of multiple test platforms. Rugged Connect software is designed to collect data from 6 systems simultaneously.
Plug and Play functionality provides the flexibility to interchange sensors without the inconvenience/ concerns of calibration. Industry standard drivers availlable for a quick and easy connect to most popular laboratories softwares. There is a dedicated team for application specific customizations for fiber optic sensors, monitor configuration and software integration to simplify the data collection of testing and monitoring applications.

Applications

- Electric Vehicle and Battery Testing
- Medical Equipment testing (MRI, PETSCAN, NMR)
- Commercial Grade Microwave Radiation
- Industrial process control and monitoring applications

- Chemical and Process Industries
- Food and Beverage Processes
- Wood drying industry

Benefits

- Sensors do not require any recalibration
- No shift over time, high stability and repeatability
- Robust packaging
- Each Monitor comes with a complete NIST calibration certificate

- Software designed for integration into test platforms
- Robust datalogging and Analytics
- Customizable according to customer specific applications
- Suitable for OEM-type applications.

TECHNICAL SPECIFICATIONS

Measurement Range	-80 °C to +300 °C (cryogenic 4 °K range optional)
Measurement range *(Optional Range extensions)*	Down to 4 °K / Up to +300 °C
Resolution	0.1°C
Accuracy	±1.0 °C (+/- 0.2 °C in relative temperature)
Number of Channels	2 - 8 Channels
Logging	1 sec interval on USB
Config port	USB (to use with Rugged connect windows software)
Max # of Channels	Expandable to 256 Channels, Daisy chain up to 32 units (via Modbus)
Serial port	RS-485 (RS-232 optional converter) with Modbus
Power	5 Volts USB powered
Battery	Optional Battery Module available
Memory	MicroSD external memory slot (up to 2 TB)
Analog output module	Fully configurable 0-10 V / 4-20 mA optional module available
Dimensions	4.92" x 7" x 2.72" 12.5 cm x 18 cm x 6.9 cm
Scan rate	200 ms / channel
Operating temp	-40 to 72 °C
Storage temp	-40 to 85 °C
Humidity	95% Non Condensing

ORDERING CODE

L201 = Lab Instrument, 201 Series

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Number of Channels,
Ex: 08 = 8 Channels (Available 02, 04, 06, 08)

Rugged Monitoring Services

Rugged Monitoring provides customization of sensors, monitors & software. In addition we offer on-site commissioning services, maintenance contracts and technical support to all customers worldwide.

About Rugged Monitoring

Industry leading team of fiber optic experts with 100+ years of combined experience committed to delivering customizable solutions for challenging applications. We offer a range of reliable, high performance, customizable sensors and monitoring solutions that are immune to external influence.

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