

# Rugged Fiber Optic Temperature Monitor

- Rugged, Compact Design
- 2 to 8 Channels, Expandable
- Plug and Play
- Best in class EMI, ESD Immunity
- 8 Analog Outputs 0-10V DC/ 4-20mA
- Software designed to be interfaced with other testing platforms

Analog Module

Rugged Connect

L201



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

## **Product Summary**

Drivers

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 -269°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. It is compatible with a wide range of fiber optic temperature sensors. 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 232/ RS 485 or analog outputs like 0-5V, 0-10V / 4-20mA. 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:**

- Industrial process control and monitoring applications
- Chemical and Process Industries
- Food and Beverage Processes

#### **Benefits**:

- No temprature drift over time and high stability
- Robust packaging
- Each Monitor comes with a NIST calibration certificate
- Battery operated for Electrical isolation
- Sensors do not require any recalibration

- Electric Vehicle and Battery Testing
- Medical Equipment testing (MRI, PETSCAN, NMR)
- Commercial Grade Microwave Radiation
- Wood drying industry
- 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 2K Range Optional )
Measurement range (Optional Range extensions)	Up to 2°K/ +300°C
Resolution	0.1°C
Accuracy	±1.0°C ( ± 0.2c in relative temperature)
Scan rate	200ms / channel
Operating temp	-40 to 72°C
Storing temp	-40 to 85°C
Number of Channels	2 to 8 (Expandable)
Power	5 Volts USB powered
Battery	Optional Battery Module available
Memory	Micro SD external memory slot
Dimensions	4.92" x 7" x 2.72" 12.5cm x 18cm x 6.9cm
Config port	USB (to use with Rugged connect windows software)
Analog output module	Fully configurable 0-10v / 4-20mA optionnal module available
Logging	1sec interval on USB
Serial Port	RS-485(RS-232 optional)
Humidty	95% Non Condensing

### **ORDERING CODE:**



L201 = Lab Instrument, 201 Series



Number of Channels, Two digits, 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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