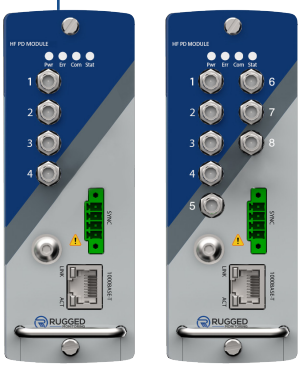
O201 Fiber Optic Temperature Monitoring with most advanced



RM's Fluorescence technology based O201 is designed with high accuracy, reliable for operation in extreme EMI, RFI, Microwave and high voltage environments. It is a multi-channel fiber optic temperature monitor with precision measurement for Original Equipment manufacturers. The O201 has a measuring range from -271 °C to +300 °C. The system is based on proven Fluorescence technology and designed for Plug and Play operation.

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 O201 is designed to collect data and is easy to integrate into existing systems through serial communication like RS-485 or analog outputs like 0-10 V / 4-20 mA. The O201 supports Modbus, CANbus protocols and a system fault relay. The module is designed with capability to add additional application logic for customer specific applications. It is designed with the needs of Monitoring, Test platforms or Industrial Process monitoring integration needs. It has the data integration capability of multiple test platforms. Industry standard drivers available for a quick and easy connect to most popular laboratories software. The fluorescence based fiber optic temperature sensor is highly capable of operating in a series of complex environments such as strong electromagnetic and high voltage.

Rugged Monitoring designs and manufactures customized state of the art fiber optic sensor systems for the measurement of temperature, strain and other physical parameters.

Our fiber optic temperature monitor with Fluorescence technology suits the requirement of measurements with difficult environmental conditions.

Features

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

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

- Robust and Reliable
- Offers a low-cost interrogator
- Suitable for OEM-type applications
- 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.

Ordering Code

O201 = Original Equipment Module, 201 Series

Number of Analog
Ex: 08 = 8 Channels (Available 00, 08)

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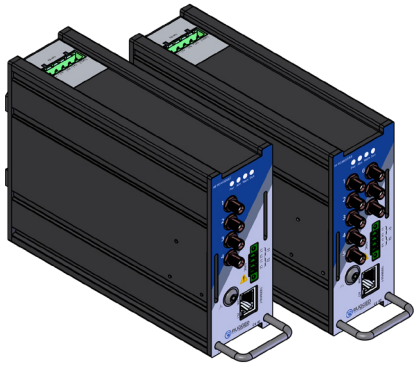
Number of Channels,
Ex: 08 = 8 Channels (Available 02, 04, 06, 08)



Technical Specifications

Measurement Range	-271 °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	1 - 8 Channels
Logging	1 sec interval on USB / Micro SD card
Config port	USB (to use with Rugged connect windows software)
Max # of Channels	Expandable to 256 Channels, Daisy chain up to 32 units (with Modbus, Canbus)
Communication Ports	RS-485 (RS-232 optional converter) with Modbus, CANbus
Power	24 VDC
Memory	MicroSD external memory slot (up to 2 TB)
Analog output module	Fully configurable eight 0-10 V / 4-20 mA module (Optional)
Dimensions	4.72" x 6.34" x 1.89" 120 x 161 x 48 mm
Scan rate	200 ms / channel (Optional: Faster scanning rates available)
Operating temp	-40 °C to 72 °C
Storage temp	-40 °C to 85 °C
Humidity	95% Non-Condensing
Relay	System Fault relay (5A)