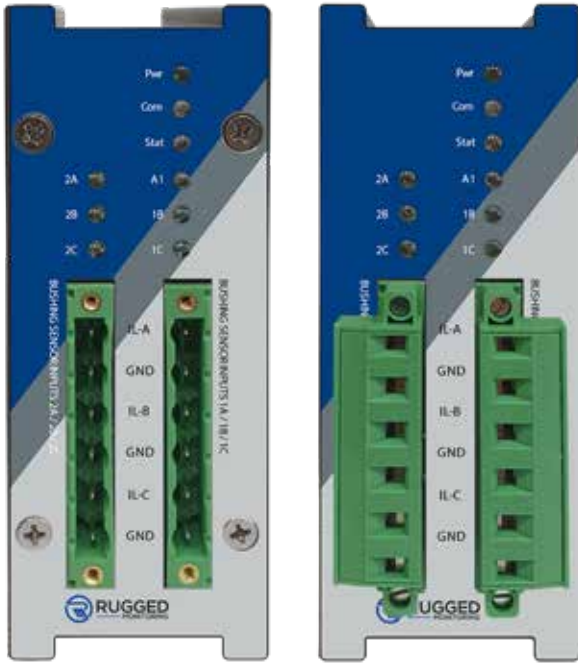


BM201 - Rugged Bushing Monitoring Module for OEMs



- Rugged, Compact Design with multiple mounting options - Din-Rail, Direct
- 3 and 6 Channels for monitoring 3/6 bushings
- Monitors Leakage Current, Tan Delta (PF), Capacitance and Voltage
- Best in class EMI, ESD Immunity
- Modbus (Serial-RS485) integration with third party systems
- LED indicators for system and channel failures
- Built-In Fail Safe Relay for System Failure

Rugged design, designed for reliability, bushing monitor for OEMs (Original Equipment Manufacturers) with advance and simple integration features to third party systems/gateways

Product Summary

The Rugged Monitoring BM201 is a compact design, designed for reliability Bushing Monitoring Module that can operate under High voltage substation environments. The BM201 Bushing Monitor combines reliability and user friendly configuration software. It has two variants, 03 channel and 06 channels, that can monitor 3 and 6 bushing respectively. The system is based on proven Balance Current (Sum of Current) method for measuring Tan Delta (Power Factor - PF), and Capacitance of Condensing Type Bushings.

The BM201 connects to the Bushing Adaptors installed at the Voltage / Test taps of the condensing (Capacitive) type bushing. It measures the leakage current from the three phases and calculates the changes in the TanDelta and Capacitance of the bushings. The measured and calculated values are then sent to the third party system via Modbus (RTU) protocol using built-in serial (RS-485) port. The BM201 also captures the hourly average of the Tan Delta, Capacitance, Voltage for absolute and rate of change. It has the data integration capability of multiple monitoring platforms. There is a dedicated team of experts available for customizing bushing monitoring solutions to meet specific customer needs.

Applications

- Online monitoring of condensing / capacitive type bushings
- Online Monitoring of Transformer Bushings
- Online Monitoring of Breaker Bushings

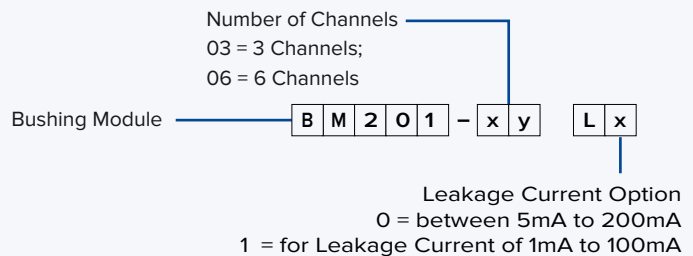
Benefits

- Suitable for OEM-type applications (TMS, Gateways)
- Multiple mounting options - Din-Rail and Direct (Bare-board)
- Cost optimized solution for bushing monitoring
- Software designed for integration into monitoring systems / gateways
- Robust datalogging and Analytics
- Customizable according to customer specific applications
- Sensors and Monitors do not require complex recalibration
- Highly robust and safe monitoring systems

TECHNICAL SPECIFICATIONS

Measurement Range Leakage Current	1mA to 200mA
Measurement Accuracy	
- Leakage Current	± 0.5%
- Tan Delta (PF)	± 0.5%
- Capacitance	± 0.1%
- Voltage	± 0.5%
Scan Rate	-200 ms / channel
Memory	MicroSD external memory slot (Up to 2 TB)
Logging	1 sec interval on USB
Serial Port	RS-485 with Modbus RTU
Configuration Port	USB (to use with Rugged Connect windows software)
Operating Temperature	-25 to 75 °C
Storage Temperature	-40 to 85 °C
Number of Channels	03 and 06 channels
Dimensions	4.92" x 4.92" x 1.89" (125mm x 125mm x 48mm)
Humidity	95% Non Condensing
Power Input	12 - 24V DC (Default)
# of Relays Outputs	01 x Fail Safe Relay for System Failure

ORDERING CODE



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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