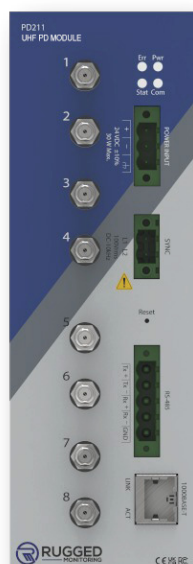


# PD211

## Advanced UHF-Based Partial Discharge Monitoring Solution



The Rugged Monitoring PD211 is a compact and durable module for accurate Partial Discharge (PD) monitoring in essential electrical assets, including Transformers, GIS Circuit Breakers, Switchgear - GIS, MV Panel and Power Cables. Engineered for reliability, the PD211 provides effective insulation health monitoring to improve safety and system efficiency.

The PD211 is an advanced Partial Discharge (PD) monitoring module that utilizes Ultra High Frequency (UHF) technology for accurate signal acquisition and analysis. It supports 4 or 8 channels in two configurations, enabling connection with an equal number of UHF PD sensors. The system is compatible with sensors operating within the 300 MHz to 2000 MHz frequency range, ensuring seamless integration across various monitoring setups.

Designed for reliability, the PD211 monitors and analyses UHF signals generated by PD activity in critical electrical assets such as Transformers, GIS Circuit Breakers, Switchgear - GIS, MV Panel and Power Cables. It classifies signals into internal PD, external PD, or noise, delivering precise diagnostics. Internal PD data is stored and processed for advanced analyses, including Phase Resolved Partial Discharge (PRPD) patterns, amplitude, discharge rate, and trend evaluations.

The PD211 features robust communication capabilities. It transmits PD amplitude and discharge rates to third-party systems via Modbus (RTU) through its integrated RS-485 port. PRPD data is stored locally and shared through its CANBUS protocol using a built-in CAN port, facilitating seamless integration with external systems for comprehensive monitoring and analysis.

## » Features

- Compact design with flexible mounting
- High Sampling Rate
- High PD sensitivity
- Secure SSD storage
- Seamlessly integrates with software
- Simultaneous PD acquisition
- Wide acquisition bandwidth
- User-selectable noise filtering
- Protocol Compatibility

## » Benefits

- Optimized for OEM Integration
- Seamless System Compatibility
- Customizable meet customers specific requirement
- Reliable and Robust Design
- Cost-Effective PD Monitoring
- Advanced Data Logging & Analytics
- Accurate PD detection with noise gating

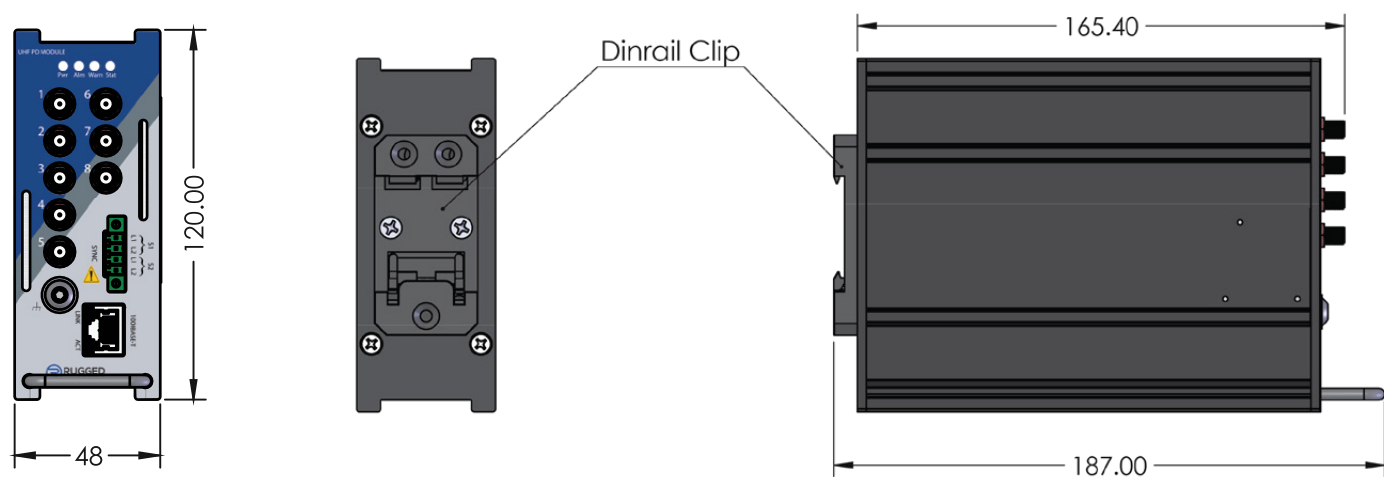
## » Applications

- Continuous Online PD Monitoring
- Multi-Point Partial Discharge Monitoring.
- GIS Circuit Breakers
- Power Cables
- High Voltage AC testing
- Transformer Monitoring
- Switchgear - GIS, MV Panel

## » Technical Specifications

|                         |                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Channels      | 04 or 08 (Simultaneous acquisition, No Multiplexing)                                                                                                                        |
| Sampling Rate           | 360 points per cycle                                                                                                                                                        |
| Acquisition Bandwidth   | 300MHz-2000MHz                                                                                                                                                              |
| PD Sensitivity          | -10 dBm to -65 dBm                                                                                                                                                          |
| Noise Elimination       | User selectable 4 UHF Band Pass Filters <ol style="list-style-type: none"><li>1. 440-575 MHz</li><li>2. 300-575MHz</li><li>3. 1100-2000MHz</li><li>4. 300-1100MHz</li></ol> |
| Data Storage (Memory)   | Factory Configured SSD Storage Upto 1TB (64GB as standard)                                                                                                                  |
| Compatible PD Sensors   | Any Ultra High Frequency (UHF) PD Sensors with bandwidth 300MHz-2000MHz                                                                                                     |
| Synchronization Inputs  | 2 Inputs (LV and HV)<br>LV: 5Vpeak<br>100 Vrms- 240 Vrms                                                                                                                    |
| Serial Port             | RS-485 with Modbus RTU                                                                                                                                                      |
| Communication Ports     | Ethernet Port for configuration and protocols (RJ45)                                                                                                                        |
| Operating Temperature   | -30°C to +40°C                                                                                                                                                              |
| Storage Temperature     | -40°C to +85°C                                                                                                                                                              |
| Dimensions              | 187.00 mm x 120mm x 48mm                                                                                                                                                    |
| Humidity                | 95% Non-Condensing                                                                                                                                                          |
| Power Input             | 24-48 VDC, 50 W Maximum                                                                                                                                                     |
| Compatible Software     | PD Live Webserver, PD Connect, RMEYE                                                                                                                                        |
| Communication Protocols | IEC61850, Modbus, RTU, DNP3, MQTT                                                                                                                                           |

# » Product Drawing



Note: All dimensions are in millimeters (mm)

# » Ordering Code

**Channels**

04 = 4 Channels  
08 = 8 Channels

|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| P | D | 2 | 1 | 1 | - | z | z | - | M | y |
|---|---|---|---|---|---|---|---|---|---|---|

**Standalone UHF PD Monitor**

**Memory**

0 = No Internal Memory (Standard)  
1 = 64 GB Memory  
2 = 128 GB Memory  
3 = 256 GB Memory  
4 = 512 GB Memory  
5 = 1TB Memory

## CERTIFICATIONS



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