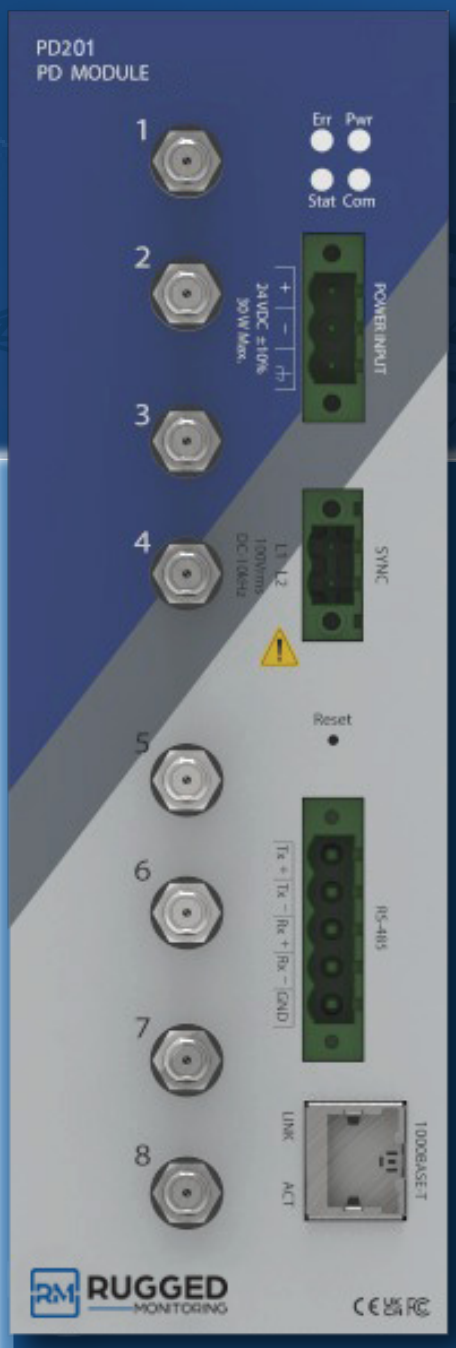
RUGGED MONITORING

MONITORING SIMPLIFIED



PD201-New Gen

HF & UHF
PD Monitoring Module- Continuous

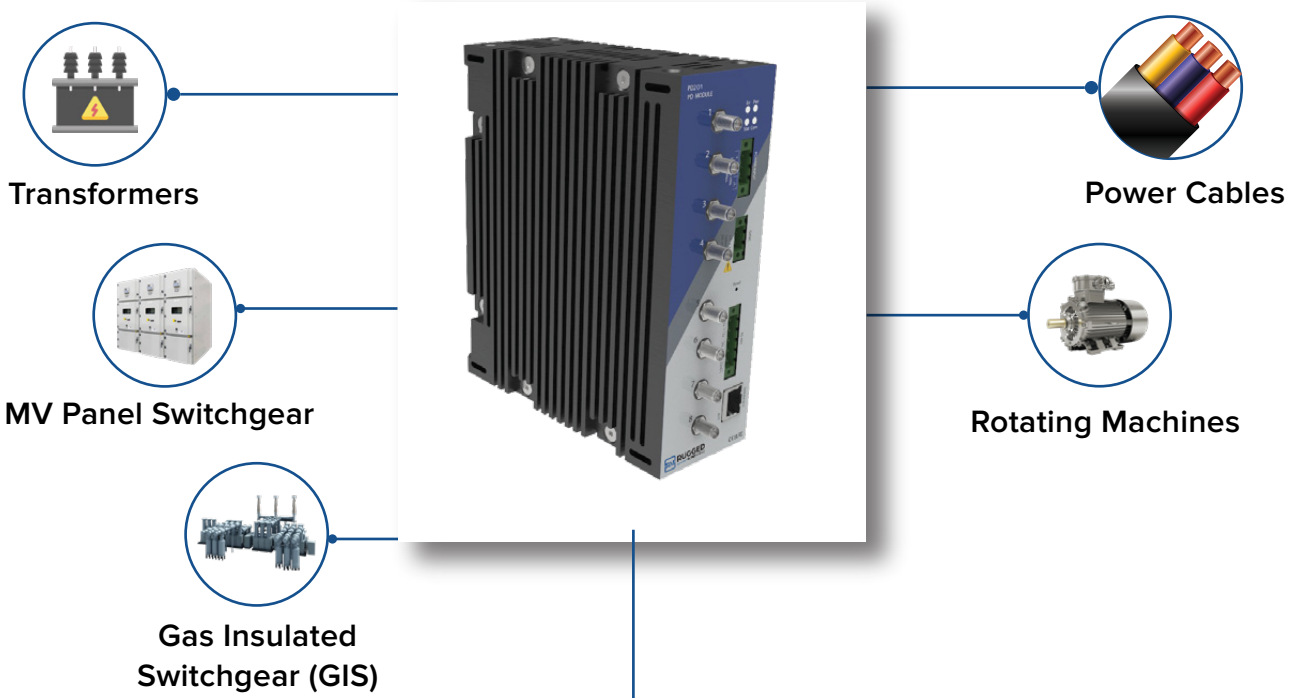
RUGGED | ROBUST | RELIABLE

PD201 - New Gen Monitoring Solution

Durable and Reliable Partial Discharge Monitoring for Critical Assets

The PD201 New Gen is our advanced Partial Discharge (PD) monitoring edge device designed for accurate and reliable performance across a wide range of critical electrical assets. Combining the capabilities of high-frequency (HF) and Ultra-High-Frequency (UHF) technologies, it ensures precise PD detection and analysis, supporting 4 or 8 configurable channels for seamless integration with various PD sensors operating across an extensive frequency range.

Intelligent PD Insights



01 Classifies Signals As Internal PD, External PD, Or Noise.

02 Providing Clear Diagnostics and Detailed Analysis.

03 PRPD Patterns, Amplitude, Discharge Rates, & Trend Evaluations

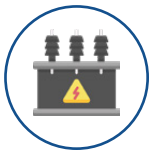
With robust communication capabilities the PD201 New Gen transmits PD amplitude and discharge data and alarms to thrid-party systems via Modbus (RTU) through an integrated RS-485 port or over IEC61850, MQTT via RJ45 Additionally, PRPD data is stored locally and can be accessed through its built-in Ethernet port, enabling comprehensive monitoring and Integration into external systems. Thanks to integrated web application PD live in PD201 New Gen, all historical data can be viewed and expert analysis can be performed via integrated software.

Designed for continuous, high performance monitoring in demanding environments, the PD201 New Gen delivers actionable insights to enhance asset reliability, improve system safety, and minimize downtime, making it a versatile and dependable solution for partial discharge diagnostics.

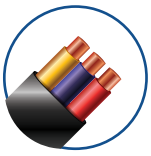
Benefits

- Ideal for OEMs
- Cost Efficient
- Easily Customizable
- Highly Accurate
- Durable and Safe
- Seamless Integration
- Effective Data Logging

Applications



TRANSFORMERS
Using HFCT and bushing adapters, with added UHF capability.



POWER CABLES AND TERMINATORS
Using HFCT for HF signals and UHF Sensors for UHF diagnostics

GAS-INSULATED SWITCHGEAR (GIS)
UHF- based PD in GIS setups

ROTATING MACHINES
HF PD monitoring with HFCT and capacitive couplers

MEDIUM VOLTAGE SWITCHGEAR (MV)
Using both HFCT and TEV sensors, along with coupling capacitors and UHF sensors

PD MEASUREMENT DURING TESTING
PD testing during HV AC applications using both HF and UHF sensors

MULTI-POINT PD MONITORING
Using synchronized HFCT, capacitive couplers, and UHF sensors

Features

DESIGN AND MOUNTING

PD201 New Gen's rugged and compact design, combined with flexible mounting options, including DIN-rail and direct mounting makes it adaptable to various installations.

NOISE MANAGEMENT

PD201 New Gen's features advanced noise gating with built-in filters and intelligent software algorithms for precise signal detection and minimal interference.

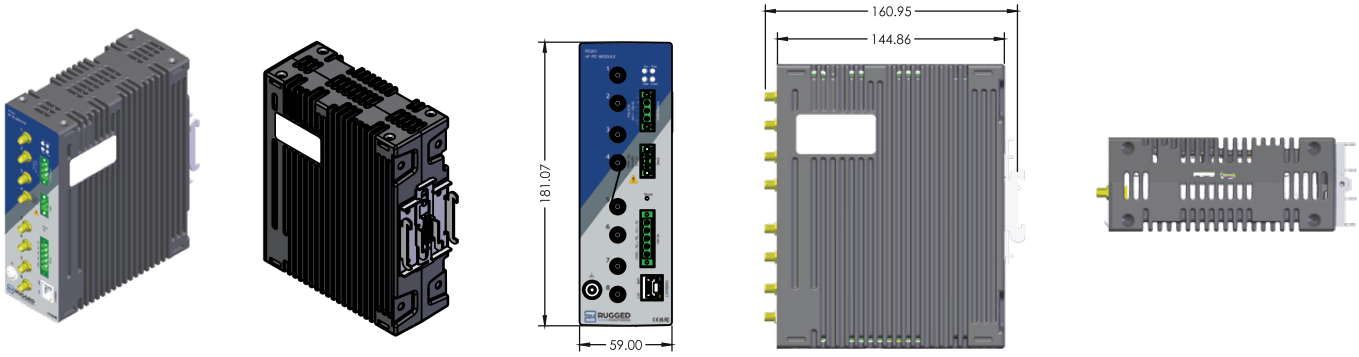
IMMUNITY

PD201 New Gen offers industry-leading EMI and ESD immunity, ensuring reliable performance in challenging and high-interference environments.

SELF-TESTING

The PD201 New Gen's system includes a built-in self-testing procedure to maintain system reliability during potential failures, enhancing safety and operational stability.

Product Drawing



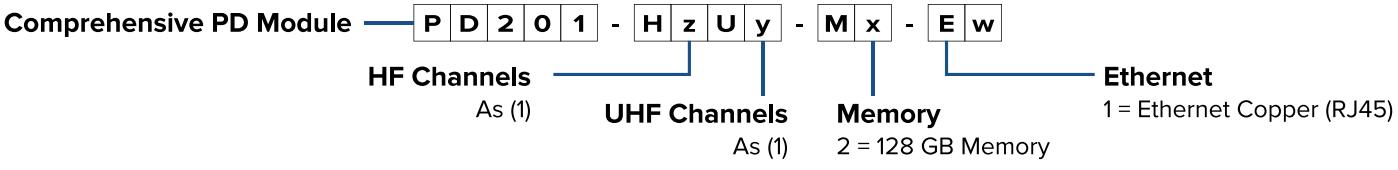
Note: All dimensions are in millimeters (mm)

Technical Specifications

FEATURE	HIGH-FREQUENCY (HF)	ULTRA-HIGH-FREQUENCY (UHF)
Number of Channels (max 8 Channels)	4 or 8 channels	4 or 8 Channels
Sampling Rate	125 MS/s per second	360 points per cycle
Acquisition Bandwidth	1 kHz-50MHz	300MHz- 2000MHz
Vertical Resolution	14-bit	16 Bit
PD Sensitivity	100uVpeak to 50Vpeak	-80dBm to -5dBm
Hardware Band-Pass Filters	-	300 MHz-1100 MHz 1000 MHz-2000 MHz
Software Controlled Notch Filters	-	300 MHz-1400 MHz, 2-notch filters
Memory (eMMC)	128GB	128GB
Compatible PD Sensors	Any High Frequency (HF) PD Sensors (Bushing Adaptors, HFCT, TEV, Capacitive Couplers, Acoustic, Ultrasonic, etc.)	Any Ultra High Frequency (UHF) PD Sensor with a sensitivity of 300MHz - 2000MHz
Synchronization Inputs	1 Voltage Channel, 16 Bit (0- 100VPeak), 1Ms/s, DC - 1kHz	
Serial Port	RS-485 with Modbus RTU	
Configuration Port	Ethernet Port for configuration and protocols (RJ45)	
Operating Temperature	-30 °C to + 70 °C	
Storage Temperature	-40 °C to + 85 °C	
Dimensions	181.07mm x 160.95mm x 59.0mm	
Humidity	95% non-condensing	
Power Input	24V	
Power Consumption	30W	
Compatible Software	PD Live Webserver, PD Connect	
Communication Protocols	IEC61850, Modbus RTU, DNP3, MQTT	

Ordering Code

PD Module can be configured as 4 or 8 Channels option. All 4 or 8 Channels can be HF or UHF or first can be HF and the remaining 4 can be UHF Channels.



CERTIFICATIONS

ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018 | Lloyd's Register | Atex Certification | NIST Certification

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