

# 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



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.





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



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







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



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



**ROTATING MACHINES** HF PD monitoring with HFCT and capacitive couplers

using both HF and UHF sensors



**PD MEASUREMENT DURING TESTING** PD testing during HV AC applications





### **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











# >> 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	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.

