

High Frequency Partial Discharge Monitor



- Rugged, simple design
- 4 synchronous input channels allow 3 phase synchronous measurement with additional external synchronous channel to enable the use of other type of sensor
- **Rugged Enterprise**, a complete software suite for analysing the data and generating reports
- Indicator LEDs to alert in case of PD alarm or warning
- Gigabit ethernet copper Cat5e or multimode fiber communication link between monitor and server
- IP65 rated

Rugged design, designed for reliability, 3 Phase synchronous partial discharge monitoring equipment.

Product Summary

"Rugged Monitoring High Frequency Partial Discharge (PD) monitoring solution is a platform that enables HV asset owners to keep monitoring PD due to insulation defects 24/7. System can also be used to perform offline PD measurement during HV AC testing. Compact size and rugged enclosure of monitor make it easy to get installed and get started. Solution can communicate with its user over IEC61850 or using Rugged Monitoring proprietary Rugged Enterprise software suite. System simple design enables it to get interfaced to third party protocols.

Each Monitor is capable of transferring data directly to Rugged Enterprise software installed on Server or data can be temporarily stored in the device in case of communication loss between server and monitor. Thousands of pulses per second can be transferred to the Server enabling the user to generate fast and reliable Phase Resolved Partial Discharge (PRPD) graphs. PRPD graphs help the user to identify type of PD in HV assets. Monitoring solution is packed with all necessary tools that help to perform effective PD measurements. Integrated variable amplifiers and on board denoising features help during onsite testing even in case of presence of huge noise.

There is a dedicated team for application specific customizations for sensors, monitor configuration and software integration to simplify cable data collection of testing and monitoring applications.

Applications

- Online continuous partial discharge monitoring
- Offline PD measurement during HV AC testing (Resonant test set, VLF, OWTS)
- Multiple point PD monitoring
- Cables and their accessories
- Rotating machines
- AIS/GIS switchgear/switchboards
- Power transformers

Benefits

- Rugged sensors, monitor and Server
- Gigabit ethernet communication between monitor and Server
- Robust design
- Each device is rigorously tested

- Software packed with useful tools for reliable and interactive PD measurements
- Robust recording and Analytics
- Customizable according to customer specific applications
- Suitable for Online or Offline PD measurements

TECHNICAL SPECIFICATIONS

Monitor	
Channels	4 simultaneous channels
Sampling Rate	250 MS/s
Bandwidth	0.01 - 100 MHz
Amplification	up to 28 dB, software selectable
Filtering	Software configurable band pass filters
Memory	
SSD	upto 256 GB (Optional)
Data Transfer	
High Resolution (pulses data on simultaneous channels)	10,000 pulses per second for 4 simultaneous channels
Low Resolution (pulse amplitude on simultaneous channels)	50,000 pulses per second for 4 simultaneous channels
Transfer Rate	400 Mbps (depending on operating system and connection)
Remote Communication	
IEC61850 (Optional) Proprietary Rugged Connect for remote communication Customized third party interface on request	

Communication Link	
Type	Ethernet Fiber / Copper
Cable	Multimode Fiber / Cat5e
IP Rating	IP65

Temperature Rating	
Ambient	-30C - 60C
Storage	-40C - 85C

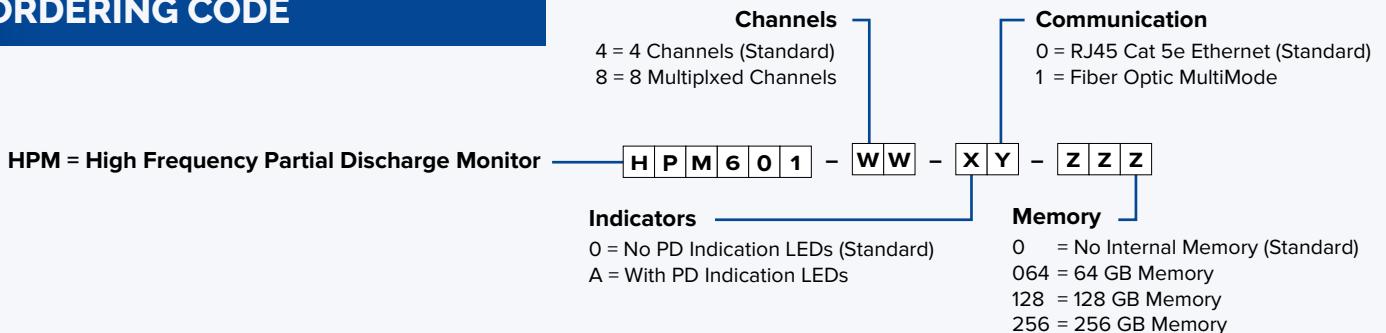
Power Rating	
Input Power	35W max

Synchronisation Inputs	
2 Inputs, software selectable	Internal External

Dimensions	
260mm(L)x310mm(W)x120mm(H)	

Software	
Rugged Enterprise	

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.