

HPM601-C

Safeguarding HV Assets with Cutting-Edge PD Monitoring



The HPM601-C delivers continuous high-frequency partial discharge (PD) monitoring for HV assets. Its compact and advanced design ensures accurate detection of insulation defects and seamless integration with industry protocols.

HPM601-C is Rugged Monitoring's highly sensitive PD monitoring solution that helps identify and record high-frequency (HF) signals to assess insulation degradation in real time. By providing timely alerts about possible faults, the edge device allows for proactive measures prior to any complete electrical asset breakdown. It also features advanced capabilities such as transient overvoltage protection, configurable band-pass filters, and a wide sampling rate, making it suitable for online testing and monitoring.

The HPM601-C can autonomously gather and store data from multiple sensors (4, 8 channels). It is also adept at high-voltage (HV) commissioning for new and retrofit electrical assets. To ensure optimal sensitivity, the sensors must match the connected ports' HF characteristics. Thus, Rugged Monitoring also offers customized sensor design and calibration services, adhering to relevant standards via vigorous testing.

Its user-friendly interface is housed in a durable polycarbonate resin traveling case and requires just an external mains supply for operations. The compact design ensures easy installation, while enhanced hardware and software capabilities allow for sensitive multi-channel PD measurements across various electrical equipment. The system supports integration with third-party protocols and can generate fast and reliable Phase Resolved Partial Discharge (PRPD) graphs, aiding in identifying PD types in HV assets. With integrated amplifiers and noise suppression, it is well-equipped for practical PD measurements even in noisy environments.

In addition to HPM601-C, Rugged Monitoring's PD Connect Software offers advanced analytics, customizable alarms and alerts, and user-intuitive dashboards to enhance operational efficiency and reduce downtime.

» Features

- Highly Sensitive PD Detection
- Transient Overvoltage Protection
- HV Commissioning & Retrofit Compatibility
- Robust and Portable Design
- Noise Suppression & PRPD Graphing
- Multi-Channel Data Acquisition

» Benefits

- Minimal interference and High Accuracy
- Cost-Effective Operation
- Improved Safety and Risk Mitigation
- Early Fault Detection & Prevention
- Optimized Maintenance Planning
- Seamless System Integration

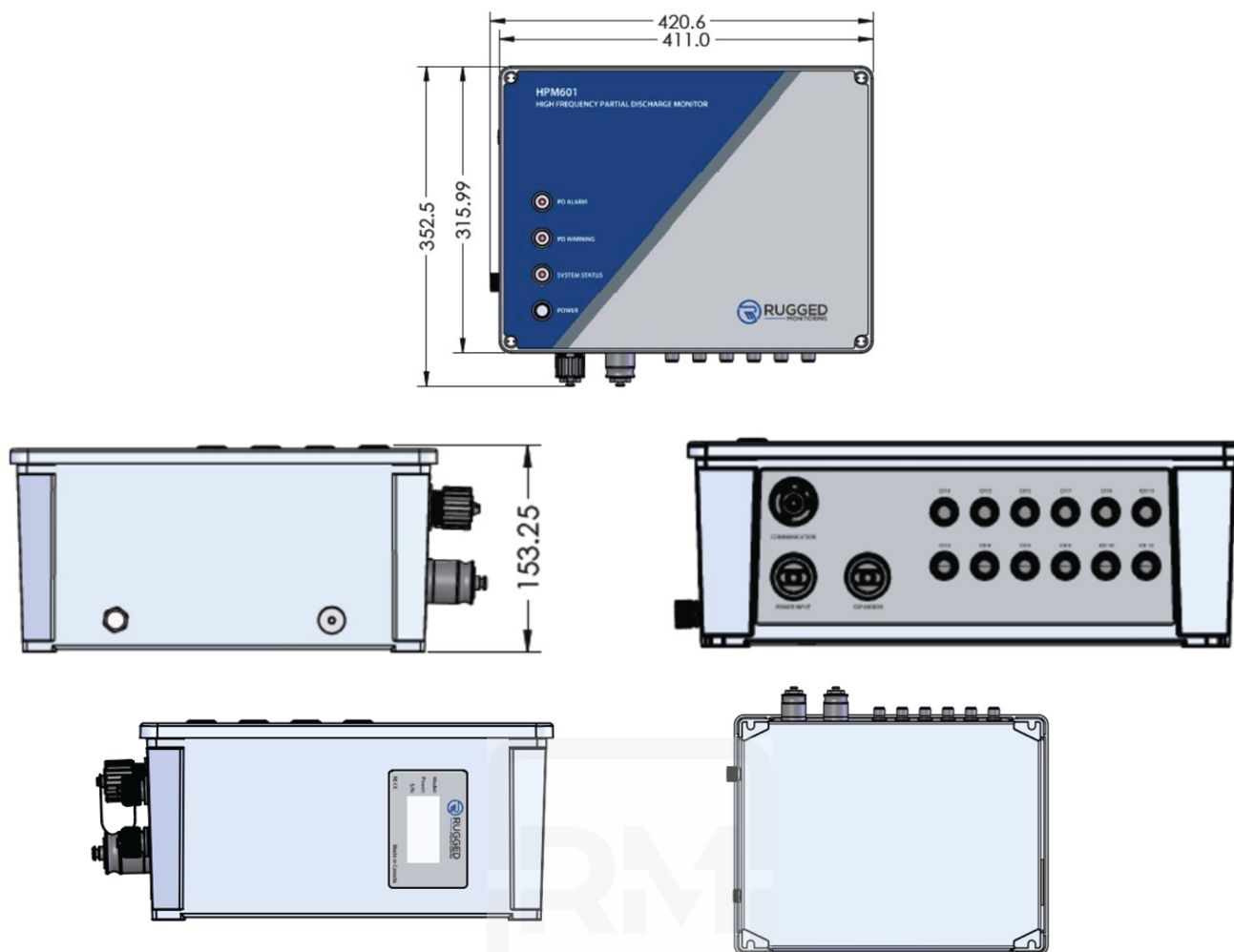
» Applications

- HV AC testing (Resonant, VLF, OWTS)
- Multi-point PD monitoring
- Power Cables
- Reactors
- Switchgear - AIS, GIS
- Power Transformers

» Technical Specifications

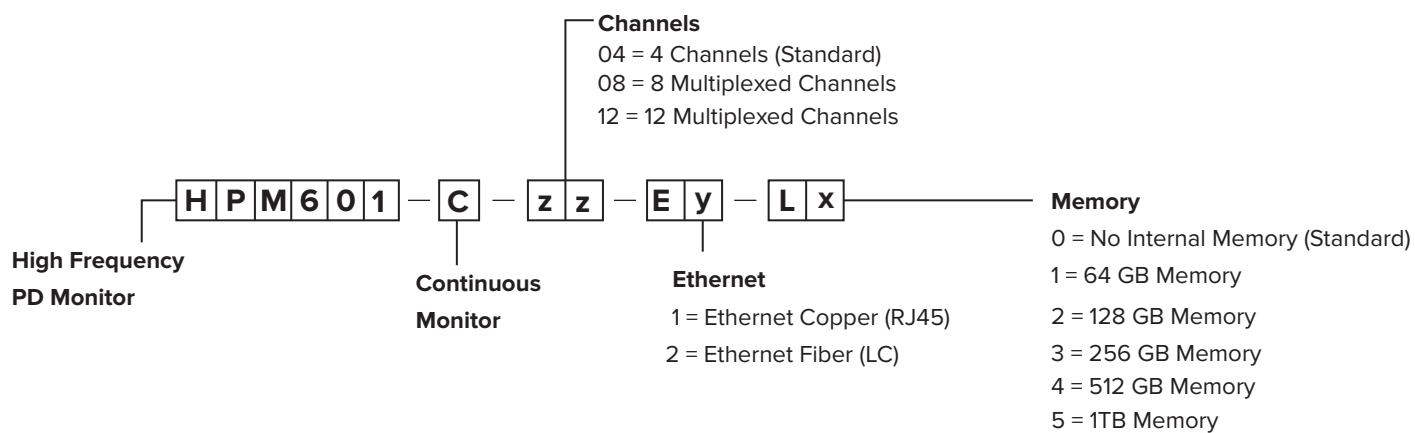
Sampling Rate	250 MS/s
HF Frequency Range	0.01 - 100MHz
No. of Channels	4 No's or 8 No's Option available
HF Amplitude Range	1mV to 2000mV
HF Noise Elimination	Software controllable band-pass filter
Communication Protocols	Ethernet Copper-RJ45. Proprietary TCP/IP, Modbus, MQTT, IEC61850
PD Measurement Types	IEC 60270
	HF and VHF
	HVAC
	Acoustic
Power Rating	50W
IP Rating	IP 65
Synchronization	1. Internal Raw Power Supply 2. External with Rogowski Coil, Electrical Field Sensor 3. 110V VT Signal
Compatible Sensors	HSENS-H, HSENS-T, HSENS-CC, BSENS, ASENS, any HF sensor range upto 100 MHz
Ambient Temperature	-30°C to +60°C
Storage Temperature	-40°C to +85°C
Dimensions	420.6 mm(L) x 352.5 mm(W) x 153.25mm(H)
Software	Web Based software OR Enterprise level (RMEYE)
Asset Types Monitored	Transformers, Reactors
	Switchgear AIS and GIS
	Power Cables

» Product Drawing



Note: All dimensions are in millimeters (mm)

» Ordering Code



CERTIFICATIONS



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018



Lloyd's Register



Atex Certification



NIST Certification

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