



UPM601-P

Ultra High Frequency
Partial Discharge Monitor-Portable

UPM601-P

Seamless Integration for Online and Offline PD Measurements



Our portable UHF PD monitoring solution ensures the reliability and safety of high-voltage (HV) assets by delivering unparalleled accuracy and allowing asset owners to detect insulation defects early on through actionable insights.

The UPM601-P is Rugged Monitoring's portable Partial Discharge (PD) monitoring solution, designed to detect and analyze ultra-high-frequency (UHF) signals in high-voltage electrical assets. It provides real-time insights into insulation health, enabling early fault detection and reducing the risk of unexpected failures. Compact and field-ready, it is ideal for the commissioning, diagnostics, and condition monitoring of transformers, switchgear, circuit breakers, and power cables.

With four UHF input channels and a frequency range of 300–2000 MHz, the UPM601-P features user-selectable band-pass filters for precise signal isolation and a high sensitivity range of -10 dBm to -75 dBm for accurate partial discharge detection. It delivers high-resolution data at 360 points per cycle, ensuring effective performance in electromagnetically noisy environments. The system supports HV AC testing during new installations or retrofit evaluations and is suitable for online and offline PD testing.

Engineered for portability and performance, the system is enclosed in a rugged IP65-rated housing, built for long-term use in harsh field conditions. It operates via a standard mains power supply and communicates through Gigabit Ethernet-RJ45 and a proprietary TCP/IP protocol.

The UPM601-P integrates seamlessly with PD Connect software, enabling live monitoring, PRPD graph generation, and detailed data analysis. Onboard noise suppression and adjustable filtering ensure reliable performance in high-interference environments.

Compact, reliable, and easy to deploy, the UPM601-P is a powerful tool for PD monitoring. It helps utilities and maintenance teams improve asset reliability and plan proactive interventions.

» Features

- Rugged and Portable Design
- Wideband UHF Coverage
- High-Resolution Signal Acquisition
- Advanced Noise Filtering
- Secure Data Communication
- Integrated Software Suite

» Benefits

- Durable and Reliable
- Quality Assurance
- Robust Data Handling
- Customizable Solutions
- Versatile Applications

» Applications

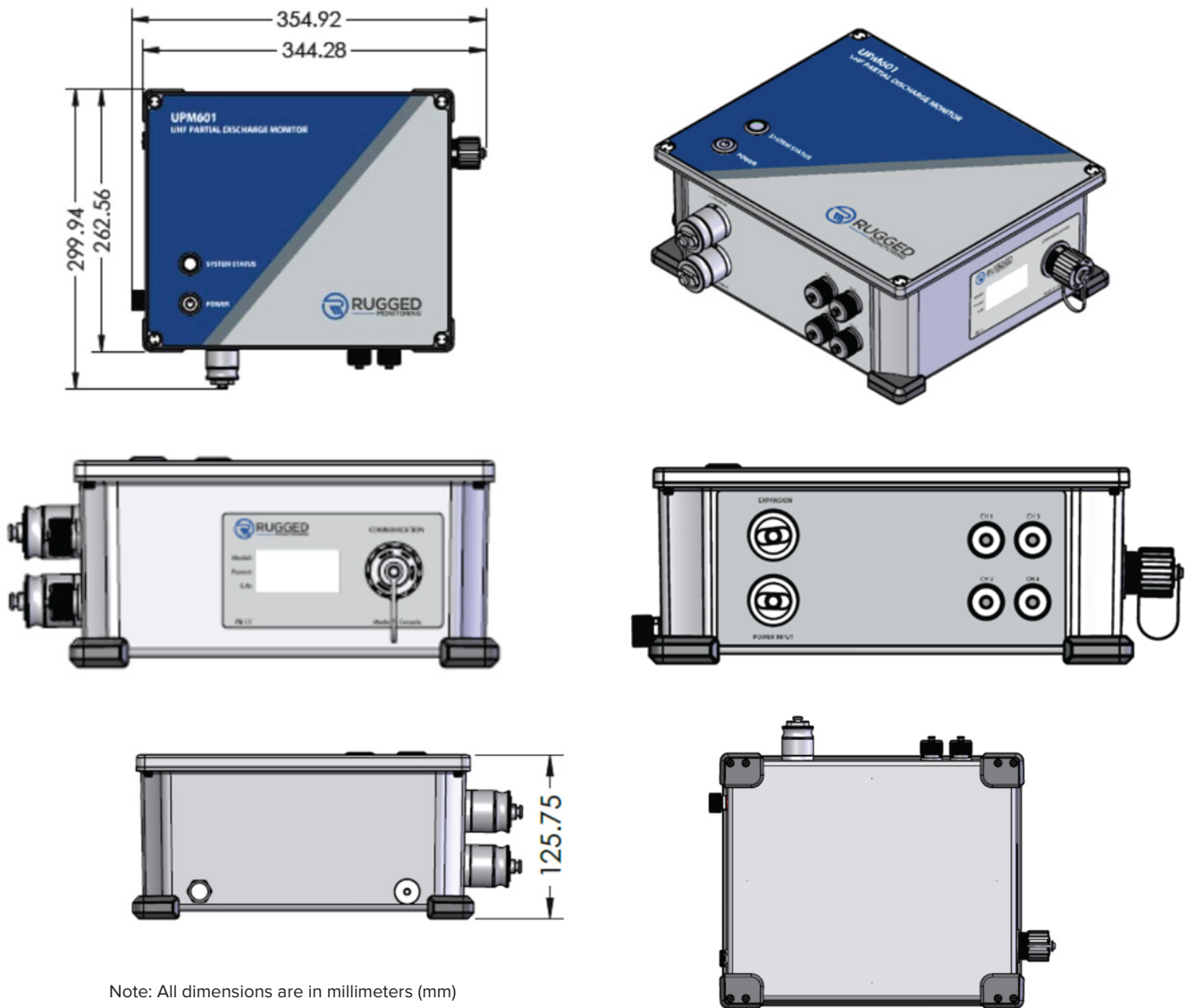
- Power Transformers
- Switchgear - GIS and MV Panel
- Power Cables

- Online continuous partial discharge monitoring
- Offline PD measurement during HV AC testing
- GIS Circuit Breaker

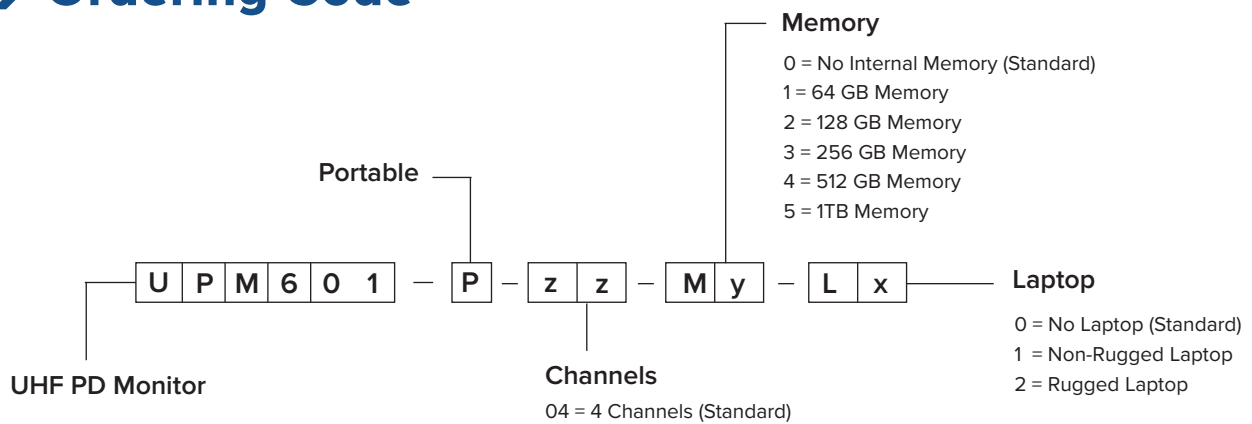
» Technical Specifications

Sampling Rate	UHF : 360 Points/Cycle
UHF Frequency Range	300MHz - 2000MHz
No.of Channels	4 No's
Sensitivity	-10dBm to -75dBm
Noise Elimination	User selectable 4 UHF Band Pass Filters. 1. 440-575 MHz 2. 300-575 MHz 3. 1100-2000 MHz 4. 300-1100 MHz
Communication Protocols	Ethernet Copper-RJ45. Proprietary TCP/IP
Power Rating	50W
IP Rating	IP65
Synchronization	1. Internal Raw Power Supply 2. External with Rogowski Coil, Electrical Field Sensor 3. 110V VT Signal
Compatible Sensors	USENS-V, USENS-T, USENS-BT, USENS-B USENS-C, USENS-G, USENS-W
Ambient Temperature	-30°C to +60°C
Storage Temperature	-40°C to +85°C
Dimensions	299.94 mm (L) x 354.92 mm (W) x 125.75 mm (H)
Software	Windows based (PD Connect-Default)
Asset Types Monitored	Transformers
	Switchgear GIS and MV Panel
	Power Cables, GIS - Circuit Breaker

» Product Drawing



» Ordering Code



CERTIFICATIONS



ISO 9001:2015



ISO 14001:2015



ISO 45001:2018



Lloyd's Register



Atex Certification



NIST Certification



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