



# CPM601-C

Comprehensive Partial Discharge  
Monitor-Continuous

# CPM601-C

## Ensure Electrical Asset Safety with Comprehensive PD Detection



The CPM601-C Monitor is designed to detect and record high-frequency (HF) and ultra-high-frequency (UHF) signals resulting from partial discharges, providing timely notifications regarding potential faults. Its integrated design accommodates various sensor types, including Acoustic, Ultrasonic, HFCTs, TEVs, Coupling Capacitors, and UHF Sensors, offering exceptional versatility across different asset categories.

The CPM601-C is Rugged Monitoring's advanced Partial Discharge (PD) monitoring solution, designed to detect and analyze both high-frequency (HF) and ultra-high-frequency (UHF) PD signals in electrical assets. By continuously monitoring insulation health, the CPM601-C enables early detection of insulation defects, preventing failures in Transformers, Switchgear - GIS, AIS, MV Panel, Rotating Machines, Power Cables, and GIS - Circuit Breaker. Equipped with automatic alarms and alerts, it ensures operators are notified when PD activity surpasses critical thresholds, allowing for timely intervention.

This state-of-the-art monitor features 4 HF and 4 UHF channels, transient overvoltage protection, software-configurable band-pass filters, and a high-speed 250 MS/s sampling rate. Unlike traditional PD measurement systems, the CPM601-C integrates advanced electronics, eliminating the need for external frequency down-converters. Its all-in-one design supports multiple sensor types, including Acoustic, Ultrasonic, HFCT, TEV, Coupling Capacitors, and UHF Sensors, providing unmatched versatility across asset types.

With its rugged, compact enclosure, the CPM601-C is built for online and offline PD testing. The monitor seamlessly transfers data to PD Connect software for in-depth analysis, while an optional onboard storage feature ensures continuous data recording, even in cases of network interruptions. It can process thousands of PD pulses per second and generate reliable Phase Resolved Partial Discharge (PRPD) graphs, aiding in fault classification and root cause analysis. Integrated variable amplifiers and advanced noise suppression enhance measurement accuracy, even in high-interference environments.

Designed for both new and retrofit applications, the CPM601-C ensures the highest level of reliability, efficiency, and safety in PD monitoring. Paired with Rugged Monitoring's RM EYE platform, it delivers AI-powered analytics, intuitive visualization, and predictive insights, empowering industries to optimize asset performance while reducing downtime and maintenance costs.

### » Features

- All-in-one sensor Compatibility
- Real-time PD Analysis
- Rugged and Compact Design
- Integrated Noise Suppression
- Automatic Alerts and Alarms
- Industry-standard communication Protocols

### » Benefits

- Enhanced Reliability
- High-precision analysis
- Reduced Downtime & Maintenance Costs
- User-friendly and Portable
- Flexible Configuration Options
- AI-driven analytics

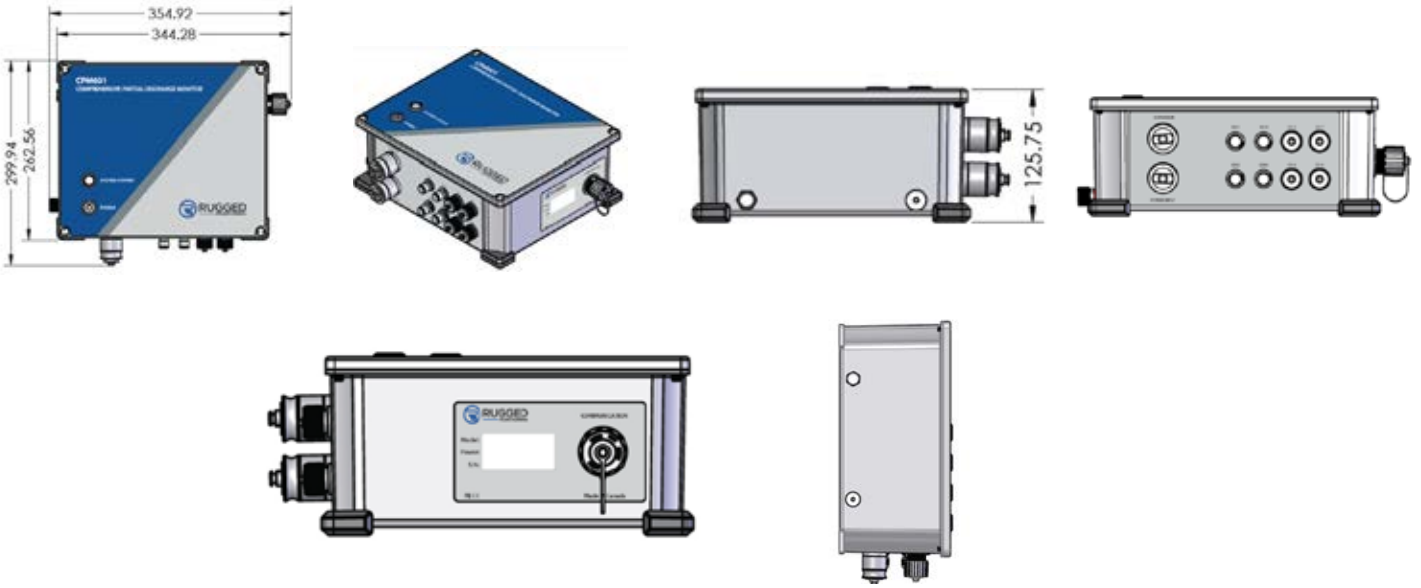
## » Applications

- Power transformers
- Switchgear - GIS, AIS, MV Panel
- Rotating machines
- Power Cables
- GIS Circuit Breaker
- Offline PD measurements during HV AC testing (Resonant, VLF, OWTS)
- Multi-point PD monitoring
- Online Partial Discharge Monitoring

## » Technical Specifications

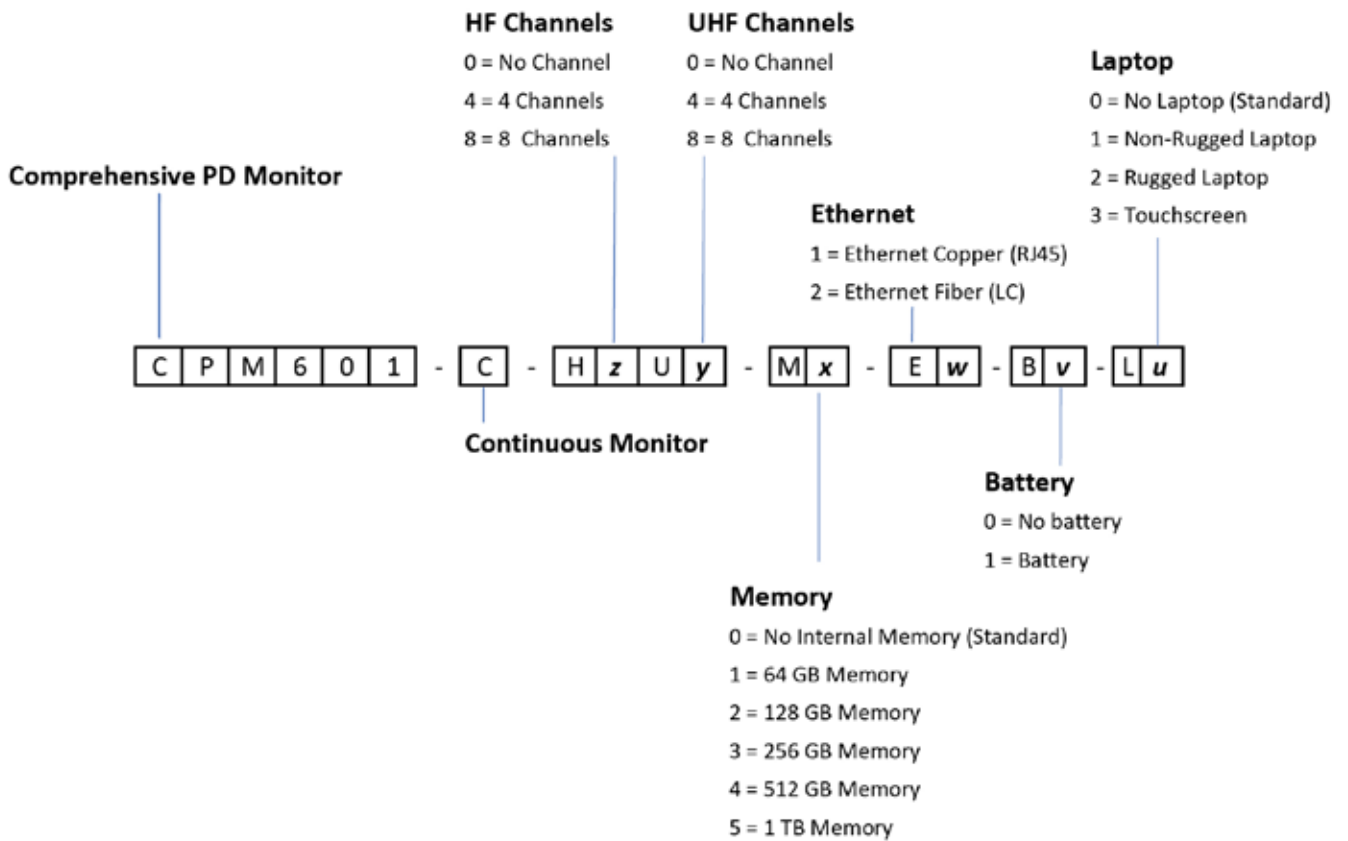
Sampling Rate		HF: 250 MS/s UHF: 360 Points/Cycle
Frequency	HF Channels	10kHz-100MHz
	UHF Channels	300MHz-2000MHz
No.of Channels	HF Channels	4
	UHF Channels	4
HF Noise Elimination		Software controllable band-pass filter
UHF Noise Elimination		User-selectable 4 UHF Band Pass Filters 1. 440 - 575MHz 2. 300 - 575MHz 3. 1100 - 2000MHz 4. 300 - 1100MHz
HF Range		1mV to 2000mV
UHF Range		-10dBm to -75dBm
Ambient Temperature		-30°C to +60°C
Storage Temperature		-40°C to +85°C
Communication Channels	Type	Ethernet Copper (100/1000 BASE-T)
	Connector	RJ45 or LC Fiber Connector
Communication Protocols		Proprietary TCP/IP
Compatible Sensors	HF Channels	<b>HF:</b> HSENS-H, HSENS-T, HSENS-CC, BSENS, ASENS
	UHF Channels	<b>UHF:</b> USENS-V, USENS-T, USENS-BT, USENS-B, USENS-C, USENS-G, USENS-W
Dimensions		354.92 mm(L) x 299.94 mm(W) x 125.75mm(H)
Software		Web-based software Or Enterprise level (RMEYE)
PD Measurements Type		IEC 60270
		HF and VHF
		HVAC
		Acoustic

# » Product Drawing



Note:- All Dimensions are in millimetres (mm)

# » Ordering Code



## CERTIFICATIONS



875 Bd. Charest O, Quebec, QC, Canada G1N 2C9

Asia Pacific | China | India | Middle East & Africa | Europe | North America | Latin America

+1-418-767-0111

info@ruggedmonitoring.com

www.ruggedmonitoring.com