

# UPM601-C

## Ultra High Frequency Partial Discharge Monitor



**"Rugged Monitoring Ultra 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
- Multiple point PD monitoring
- Power Transformer
- Gas Insulated Switchgear (GIS)
- Circuit Breakers
- Cable Terminations

## Features

- 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

## 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

<b>MONITOR</b>	Channels	4 simultaneous channels
	Sampling Rate	250 MS/s
	Bandwidth	300 MHz - 2000 MHz
	Amplification	up to 50 dB, software selectable
	Filtering	Software configurable band pass filters
<b>MEMORY</b>	SSD	upto 256 GB (Optional)
<b>DATA TRANSFER</b>	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)
<b>REMOTE COMMUNICATION</b>	IEC61850 (Optional)	
	Proprietary Rugged Connect for remote communication	
	Customized third party interface on request	
<b>COMMUNICATION LINK</b>	Type	Ethernet Fiber / Copper
	Cable	Multimode Fiber / Cat5e
	IP Rating	IP65
<b>TEMPERATURE RATING</b>	Ambient	-30°C - 60°C
	Storage	-40°C - 85°C
<b>POWER RATING</b>	Input Power	35W max
<b>SYNCHRONIZATION INPUTS</b>	Input 2 Inputs, software	Internal
	Selectable	External
<b>DIMENSIONS</b>	260mm(L)x310mm(W)x120mm(H)	
<b>SOFTWARE</b>	PD Live, Rugged Enterprise/ RMEYE	

## Ordering Code

