

# PDPProbe Plus

## All-in-one Handheld Solution for PD Measurement



### Features

- Dual channel and simultaneous display
  - First channel: TEV, UHF, HFCT
  - Second channel: Ultrasonic, Acoustic Emission
- Display modes
  - Dual display with EM and Audible (numerical)
  - PRPD Pattern
  - PRPS Pattern
- Synchronization
  - Synthesized phase
  - Wireless synchronized to power frequency
- Signal auto-analysis and recognition
- Support 4 frequency ranges
  - Filter out low noise interference
  - Improve sensitivity
- Multiple unit options
  - mV/uV
  - dBmV/dBuV
  - pC
- 3.5" LCD color touchscreen
- Up to 8 hours operation, USB charging compatible
- NFC Technology for better testing efficiency

PDPProbe is designed to simplify the inspection process in substations. The fast scanning capability and multiple detecting methods allow users to quickly survey the condition of equipment, and determine if detail investigation is required. The handheld device is equipped with dual detection channel and powerful auto-analysis function to determine PD type.

PD detection is an early warning method to insulation defects or other possible failure related to electrical and mechanical issue. By understanding the PD types, failure mechanism and risk assessment could be made, follow the proper decision and action to prevent breakdown.

### Efficient PD Detecting

PDPProbe is a rapid survey tool for Partial Discharge detection, utilizing different types of sensor including TEV, HFCT, UHF, Acoustic and Ultrasonic for different applications. Through its dual channel design, simultaneous results from two separate sensors can be compared in order to reduce unnecessary sensor switching for comparison. Dual channel reading will be displayed, one from electromagnetic channel plus one from audible channel.

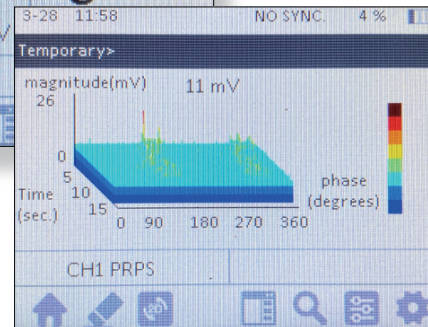
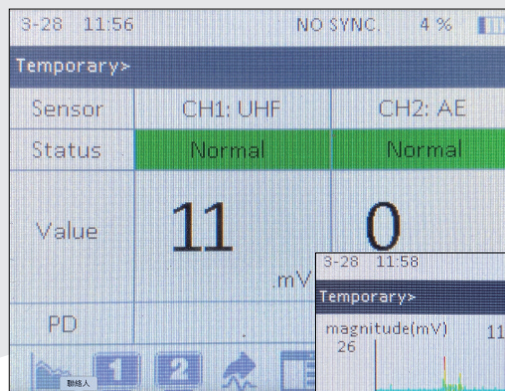
Built-in NFC is an innovated asset management function, that allows on-site testing engineer to improve testing procedure and accuracy.

### Enhanced Analysis Function

Dual magnitude display, PRPD and PRPS are basic functions of PDPProbe. With the aid of PDS's Big Data technology, PDPProbe has built-in signal auto-analysis and recognition function to help the user to distinguish different types of discharge and noise.

### Benefits

- Fast scanning at substation to discover defects
- Wide range of sensors for more accurate result
- Dual channel for different detection method comparison
- Reduce unnecessary sensor changes
- Multiple display modes to see PD detail
- Auto-recognition of PD type and Noise pattern helps analysis process
- Signal recording of both channels
- NFC tag function improve on-site test procedure
- Eliminate unscheduled downtime and minimize scheduled downtime




## Specifications

Parameter	Value
Connection Type	Dual BNC
Channel 1 Measuring Type (UHF, HFCT, TEV)	Electrical sensor
Channel 1 Measurement Range (UHF, HFCT, TEV)	6 to 70 dBmV
Channel 1 Bandwidth	10 MHz to 1500 MHz
Channel 2 Measuring Type	Acoustic Sensor (US, AE)
Channel 2 Measurement Range	-6 to 70 dBuV
US Bandwidth	40 kHz $\pm$ 2 kHz
AE Bandwidth	10 kHz ~ 500 kHz
NFC	Build in
Recording Time	10 min per recording
Sample resolution	12 bit

Parameter	Value
Gain control	Auto or Manual
Display	3.5" Color Touch Screen
Communication Channel	Micro USB
Battery Type	Lithium Battery 6600 mAh
Operating	At least 8 Hours continuously
Charging unit - Input power	90 to 264 VAC, 50/60 Hz
Charging unit - Output power	5 VDC, 2A
Operating Temperature	5 to 55 $^{\circ}$ C
Operating Humidity	90% RH
Dimension	92 x 172 x 39 (mm)
Weight	300 g (PDPProbe)

## Accessories

	Sensors						
	Type	Ext	TEV	Airborne	HFCT	AE	Parabolic Disk
							
TX							
Wireless							
Phase							
Synchronizer							
Bandwidth		30 MHz 2000 MHz	3 MHz 100 MHz	40 kHz $\pm$ 2 kHz	10 kHz 20 MHz	10 kHz 500 kHz	40 kHz $\pm$ 2 kHz
PD Status		Ext., Int, Corona	Ext., Corona	Ext., Corona	Ext., Int, Corona	Ext., Corona	Ext., Corona
Application		Cabe Joint Ground Wire Cable Termination	HV Switchgear	HV Switchgear	Ground Wire Cable Termination	Oil Transformer	Outdoor HV Facilities