



PDM6000

Partial Discharge Detector

The **PDM6000 Partial Discharge Detector** is a compact, multi-functional device designed to detect and analyse partial discharge activity in high-voltage electrical systems. Utilising advanced detection methods including TEV, ultrasonic (contact and airborne), HFCT, and UHF, enables early identification of insulation faults to prevent equipment failure and costly downtime. Ideal for use on **switchgear, transformers, cables, and substations**, the PDM6000 supports predictive maintenance by providing reliable diagnostics across a wide range of electrical assets.

Key Features

- Multi-detection: TEV, AE, AA, HFCT, UHF
- Advanced analysis: PRPS, PRPD, spectrum display
- 3.5" touchscreen (640 × 480)
- Adjustable alarm thresholds
- Compact & lightweight (500g)
- 8 hours battery, Type-C charging
- 32GB storage, WiFi/4G optional
- Operates from -20°C to 55°C

Specifications

Detection Functions	
Detection method	TEV(Transient Ground Voltage), AE(Contact Ultrasonic), AA(Non-contact Ultrasonic), HFCT(High-Frequency Current Transients), UHF(Ultra-high frequency)
Alarm function	Supports (alarm threshold can be freely set)
Display screen	3.5-inch display with 640*480 resolution, capacitive touch screen
AA performance	
Detection band	40±1kHz
Detect dynamic range	-8 ~ 68dBμV
Transducer sensitivity	-65dB(0dB=1volt/μbar RMS SPL)
Detect linearity error	≤10%
Detection spectrum	PRPS spectrum, PRPD spectrum, continuous spectrum, flight spectrum, pulse waveform spectrum
AE Performance	
Detection band	20 ~ 200kHz
Detect dynamic range	0 ~ 60dBμV
Transducer sensitivity	Peak sensitivity ≥70 dB (V/(m/s)), mean sensitivity ≥60 dB (V/(m/s))
Detect linearity error	≤10%
Detection spectrum	PRPS spectrum, PRPD spectrum, continuous spectrum, flight spectrum, pulse waveform spectrum
TEV Performance	
Detection band	3 ~ 100MHz
Detect dynamic range	0 ~ 60dBmV
Detect linearity error	≤10%
Detection spectrum	PRPS spectrum, PRPD spectrum, continuous spectrum
HFCT performance	
Detection band	3 ~ 30 MHz
Detect dynamic range	0 ~ 60dBmV
Detect linearity error	≤10%
Detection sensitivity	≤3PC
Sensor transmission impedance	≥10mV/mA
Detection spectrum	PRPS spectrum, PRPD spectrum

UHF performance	
Detection band	300MHz ~ 1500MHz
Detect dynamic range	-70 ~ 0dBm
Equivalent height of sensors	≥10mm
Detection sensitivity	≤2.5V/m
Built-in filter	Full pass, low pass, high pass
Detection spectrum	PRPS spectrum, PRPD spectrum
Power frequency synchronization	
Power frequency synchronization method	Internal synchronization (frequency adjustable), power synchronization
Power Supply Synchronous Transmission Method	Wireless transmission
Power supply	
Power supply mode	Powered by built-in lithium battery
Charging method	TYPE-C charging (connectable to power bank)
Continuous working time	>8 hours
Memory	
Storage method	32GB high-speed SD card storage
Wireless connection	
WIFI (optional)	Transmit real-time detection spectrum to mobile devices via WIFI and support image preview from SD cards through WIFI.
4G (optional)	Real-time detection of spectrum data to mobile phone via 4G transmission
Physical parameters	
Interface	TYPE-C interface, Micro SD slot, 3.5mm headphone jack, BNC interface (for UHF sensor connection), 6-pin LEMO interface (for AE sensor and HFCT sensor connection)
Working temperature	-20 ~ 55°C
Storage temperature	-40 ~ 70°C
Dimension	188*90*36mm
Weight	500g

Please be aware specifications can vary from time to time