



GDPD-414H Portable Partial Discharge Detector



General Information

The GDPD-414H handheld Partial Discharge Detector adopts smart quick intelligent power test system (Soft No. 1010215, trademark registration number 14684481).

HVHIPOT Company introduces international advanced PD detection technology to develop and produce. The portable high-efficiency partial discharge inspection tool for high-voltage insulation equipment. It can flexibly configure various sensors according to different products to be tested. TEV, ultrasonic and HFCT are suitable for partial discharge detection of high-voltage switchgear and ring network cabinet; ultrasonic and UHF are suitable for detecting the insulation state of GIS; ultrasonic

and HFCT are suitable for testing the insulation state of the cable. The built-in expert diagnosis system can analyze the test data and judge the discharge energy and possible parts. It is widely used in electric power and railway.

Features

- The whole machine adopts portable ABS engineering chassis. All PD detection hosts, tablets, sensors, chargers and signal cables are placed in the portable engineering chassis. The total weight is less than 5KG, easy for carrying and operating.
- Portable PD signal processing host: self-developed high-speed sampling board, 4-channel synchronous data acquisition, signal processing, feature parameter extraction, data can be sent to the handheld terminal by wire and wireless.
- Software system: analysis software based on ARM embedded system, display software based on windows system.
- A data acquisition host can simultaneously configure 2/4 channels of the same or different sensors, and can simultaneously collect and analyze 2/4 channels of signals.
- Handheld display panel: Uses an industrial-grade 8.1" 1280 x 800 IPS touch screen.
- The software system judges the discharge energy and location according to the detection data, and can display the PRPS and PRPD maps, ellipse diagrams, discharge rate maps, QT maps, NT maps, PRPD cumulative maps--Q-N maps of each signal channel, and can display amplitude and pulse number of each signal channel . And all the data can be stored.

- Over-limit alarm: The software adopts three-color indication modes of red, yellow and blue, which indicates the severity of partial discharge and facilitates information reading.
- Average trouble free time: over 50000hours
- Safety performance: meets GB/T 19862-2005 general requirements for switchgear

Specification

PD signal acquisition host	
CPU Working frequency	800MHz
Operating system	Linux embedded operating system
Wired network port	LAN network port
Wireless network port	Built-in wireless WiFi
System running memory	512M
System storage memory	256M
Data acquisition frequency	80MHz
Ultrasonic detection channel	
Measurement range	0-60mV
Frequency detection range	20~200kHz

UHF detection channel	
Detection frequency	300~1500MHz
Measurement range	-80~10dBm
Error	± 1 dBm
Resolution	1dBm
HFCT detection channel	
Frequency range	0.5~100MHz
Error	± 1 dBm
Dynamic Range	60dB
Measurement range	0-100mV
Accuracy	1dBm
TEV detection channel	
Frequency range	3~100MHz
Error	± 1 dB/mV
Sensitivity	0.01mV
Measurement range	0-60dB/mV

Resolution	1dBm/mV
Battery	
Built-in battery	Lithium battery, 12V, 2000mAh
Use time	about 6 hours
Charging time	About 2 hours
Battery protection	Over-voltage and over-current protection
Battery charging	
Rated voltage	12.6V
Charging output current	2A
Operating temperature	-20°C-60°C
Operating humidity	<80%
Hand-held display terminal (industrial grade)	
CPU	Intel Quad Core Atom Z3735F
GPU	Intel HD Graphic (Gen7)
Flash	32GB
RAM	2GB

Operating system	Windows10
Display	8.1 inch 1280×800 IPS screen
Network interface	Wifi and Bluetooth
Battery	3.7V 8500mAH polymer lithium ion battery
Size	
PD acquisition host size	240mm*165mm*55mm
PD acquisition host weight	0.65kg
Display tablet terminal size	395mm*295mm*105mm
Display tablet terminal weight	0.85kg
Overall box size	570mm*360mm*240mm
Working environment	
Working temperature	-20℃~50℃
Environment humidity	0~90%RH
IP level	54