GDPD-414 Portable Partial Discharge Inspector

General Information

GDPD-414 Portable Partial Discharge Analyzer 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 portable and efficient PD inspection tools for live high-voltage insulation equipment. It can flexibly configure various sensors according to different tested objects. TEV, AE and HFCT are suitable for partial discharge detection of high-voltage switchgear and ring network cabinet; AE and UHF are suitable for detecting the insulation state of GIS; AE 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

- Adopt self-developed high-speed DSP/FPGA sampling board, 4-channel synchronous data acquisition, signal processing, feature parameter extraction, data can be sent to the 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 4 channels of the same or different sensors, and can simultaneously collect and analyze 4 channels of signals.
- 6/8/16 channels can be configured according to customer's different demands.
- 8.1 inch tablet or Thinkpad notebook as optional
- 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, fai-Q-N maps of each signal channel, and can display PD signal amplitude and pulse number of each signal channel .
- 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.
- Electromagnetic compatibility:

Electrostatic discharge immunity meets level IEC 61000-4-2: 2001

Damped oscillatory magnetic field immunity meets IEC 61000-4-10: 1993 level 3

Power frequency magnetic field immunity meets IEC 61000-4-8: 2001 level 3

Pulse magnetic field immunity meets IEC 61000-4-9: 1993 Level 3

Specification

PD signal acquisition host	
CPU Working frequency	1.2GHz
Operating system	Linx embedded operating system
Wired network port	LAN network port
Wireless network port	Built-in WiFi
System running memory	1G
System storage memory	512M
Data acquisition frequency	250MHz
Ultrasonic detection channel	
Measurement range	0-60mV
Frequency detection range	20~200kHz
UHF detection channel	
Detection frequency	300~1800MHz
Measurement range	-80~10dBm

Error	±1dBm
Resolution	1dBm
HFCT detection channel	
Frequency range	0.5~100MHz
Error	±1dB
Dynamic Range	60dB
Measurement range	0-100mV
Accuracy	1dB
TEV detection channel	
Frequency range	3~100MHz
Measurement range	0-60dB/mV
Sensitivity	0.01mV
Error	±1dB/mV
Resolution	1dBm/mV
Battery	
Built-in battery	Lithium battery, 12V, 4000mAh

Use time	about 8 hours
Charging time	About 2 hours
Battery protection	Over-voltage and over-current protection
Battery charger	
Rated voltage	12.6V
Charging output current	2A
Operating temperature	-20℃-60℃
Operating humidity	<80%
Hand-held display terminal (industrial grade) or ThinkPad notebook	
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	395mm*295mm*105mm
PD acquisition host weight	0.85kg
Display tablet size	570mm*360mm*240mm
Display tablet weight	0.85kg
Overall box size	570mm*360mm*240mm
Working environment	
Working temperature	-20℃~50℃
Environment humidity	0~90%RH
IP level	54