## RDPDG-102 GIS Partial Discharge Inspection Instrument

The GIS partial discharge detection device and sensor are developed and produced by our company's technical personnel based on years of partial discharge detection experience. The software adopts advanced signal processing technology, covering a variety of data statistics methods and graphic display modes. It is



equipped with high-energy lithium battery, which can flexibly realize the detection of GIS Partial discharge signal and ultrasonic signal, it can detect the partial discharge of GIS in all directions, and analyze the current insulation state of GIS by checking the partial discharge of the equipment. Ultra-high frequency sensor and ultrasonic sensor are used to realize on-site partial discharge on-line inspection of transformer.

## Product features

- 1. Detecting the insulation condition of GIS in operation, displaying the current partial discharge value and discharge waveform, can find the hidden danger of equipment safety in advance and avoid major accidents.
- 2. The system has strong anti-interference ability and reliable electromagnetic compatibility. At the same time, the advanced signal processing technology such as digital filtering can effectively eliminate the on-site interference and realize partial discharge measurement in strong interference environment.
- 3. It can continuously record waveform, save data and graphics at any time, so that users can call and analyze at any time when necessary.
- 4. When the high-voltage equipment exceeds the warning value, the instrument will give an alarm automatically.
- 5. The instrument software can display the waveform, time domain, frequency spectrum and trend of discharge, and can clearly display the discharge value, the number of pulses and their correlation with phase, the number of pulses per week, short-term severity, etc., and can reflect the development of partial discharge.

- 6. The instrument complies with the relevant provisions of iec60270 and iec62478 draft, and can be displayed by PC value, MV value and DB value.
- 7. Small size, easy to carry, convenient for users to carry out independent test on site, select 6.5-inch large screen high brightness LCD display, can clearly display graphic data in the sun.
- 8. The system adopts multi-channel data acquisition, which can process discharge electrical signal, ultrasonic signal, antenna signal and other types of signals.
- 9. The test host has the functions of shockproof and dustproof, and adopts the windows operating system. The touch screen operation is simpler and more practical.
- 10. The device can complete on-line partial discharge test and discharge point location test.

## Product specifications and technical parameters

- 1. Number of channels: Two independent measurement channels (one UHF measurement channel and one US measurement channel)
- 2. Sampling rate: Max 200MSa / s
- 3. Sampling accuracy: 12bit
- 4. Range azimuth: 0.01mv  $\sim 20$ V / 100dB
- 5. Frequency range:  $1Hz \sim 1MHz$
- 6. Range nonlinear error: 5%
- 7. Display: 6.5-inch TFT true color LCD touch screen, resolution  $640 \times 480$
- 8. Spectrum display mode: 2D PPRS display, 3D PRPD display, sine display, spectrum (AE) display
- 9. Storage: 4GB physical storage; Hard disk 32GB (used to store test records and data)
- 10. Host interface: 2 USB ports, 1 power port, 1 network interface, 2 electrical signal interfaces, 1 external synchronization interface
- Power mode: built in lithium battery or external AC power supply (AC220V, 50 Hz)

- 12. Ambient temperature: 20 °C ~ 60 °C
- 13. Storage environment temperature: 20 °C ~ 45 °C
- 14. Host interface: 2 USB interfaces, 1 power interface, 1 network interface, 2 electrical signal interfaces and 1 external synchronization interface
- 15. UHF parameters: sensitivity  $-65 dBmV \sim 10 dBmV$ , measurement frequency band 300 MHz-3GHz, resolution 1 dBmV
- 16. US parameters: measurement range  $0 \sim 60 dBmV$ , measurement bandwidth  $20 kHz \sim 200 kHz$ , resolution 1 dB