

APM 5000

On-line PD Monitoring System for GIS/GIB



APM5000 detects and alerts various defects inside GIS by analyzing UHF signals generated by partial discharge that can cause progressive deterioration of insulating materials, ultimately leading to electrical breakdown.

- ▶ Suitable for on-line partial discharge monitoring of extra-high voltage GIS and GIB
- ▶ Able to detect less than 5 pC according to CIGRE TF 15/33.03.05
- ▶ Compliant with EMC and electricity safety international standards such as IEC61000-4-X, IEC60255-5, IEC60068-2-X, IEC60529/2001, IEC60270, and CISPR22

Diagnosis Unit

Item	Specification
Power	90 to 240 VAC, 50/60Hz
Input	More than 250 channels
Diagnosis	Built in neural network engine classifies PD into 5 types: Protrusion Electrode, Floating Electrode, Defective Insulator, Free Moving Particle and Noise
Alarming	HMI, Email, IEC61850
Graphic Tools	PRPD, PRPS, Trend, and others
Channel Configuration	Three threshold levels for alarming can be configured for each channel individually
IEC61850	Enabled
Remote Monitoring	Enabled
Communication	10/100Base-T/TX Ethernet
Storage	Database
Self Test	Enabled

Local Unit

Item	Specification
Power	90 to 240 VAC, 50/60Hz 120 to 370 VDC
Input	8 UHF Channels, N-Type Connector
Sensitivity	Can detect discharge less than 5 pC within monitoring area of GIS/GIB
Input Bandwidth	Wide Bandwidth 100 ~ 2000MHz
Dynamic Input Range	- 65 to 0 dBm
Band Pass Filter	Combination of 4 LPF and 4 HPF
Noise Gating	Enabled (External Noise Sensor)
Communication	Fiber Optic (100Base-FX)
Notification	4 x LED Status Indicators
Operating Temperature	-25°C to 55°C
Operating Humidity	100%
Enclosure Rating	IP54
Dimensions	355 x 625 x 270 (W x H x D) mm

System Configuration

