

## **APM 1200**

#### **On-line PD Monitoring System for MVSG**



### **APM 1200**

It is an advanced on-line diagnosis system for medium voltage switchgear that predicts any problems for advanced maintenance by detecting partial discharge such as Corona, Arc that is generated from degradation of internal system of medium voltage switchgear, thereby contributing to prevent damages from system breakdown, electrical fire, etc. and to assure system quality and longevity.

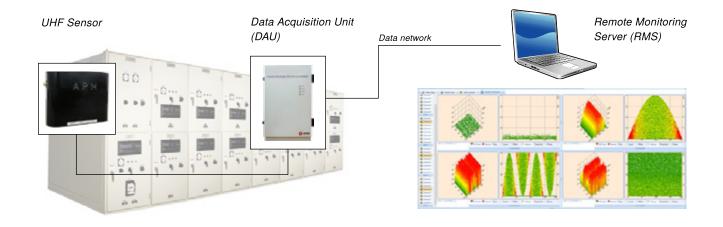
#### **Diagnosis Unit**

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 Elec- trode, Defective Insulator, Free Moving Particle and Noise
Alarming	HMI, Email
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 MVSG
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 580 x 196 (W x H x D) mm

#### Configuration



# APM 1200 CASE STUDY



#### M/V OPDM Network Configuration



#### **M/V OPDM Installation**

#### UHF Sensors installed inside panels







UHF Sensors installed at cable termination



DAU installed on basement

