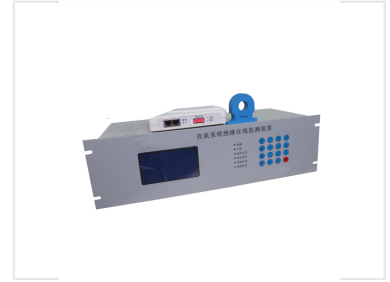


DC System Insulation Online Monitoring Device

This device is designed for real-time monitoring of insulation status in DC systems. It provides comprehensive monitoring of voltage levels and insulation resistance, with visual indicators and communication ports for data logging and remote monitoring.



Product Overview

Advanced DC System Insulation Monitoring

The PEN-JYC DC system insulation on-line monitoring device is an advanced solution for real-time detection of grounding faults, insulation drops, and ring network states in complex power systems. Utilizing innovative distributed system architecture and the SynSystem analysis algorithm, the device ensures high-precision monitoring of DC bus voltages and insulation resistance. It provides critical operational safety through intelligent pattern matching, historical event logging, and seamless integration with automation systems via RS485 interfaces.

System Capabilities

Key Functional Features

- Real-time AC/DC voltage monitoring
- Ground loop detection and diagnosis
- Insulation classification warning
- Voltage balance compensation
- Historical event recording (up to 1000 logs)

Communication Interfaces

RS232 • RS485 • RS422 • YX Switching

Supported DC Voltages

220V, 110V, 48V, 24V

Performance Metrics

Featured Monitoring Metrics

0.5 %

Voltage Monitoring Error

500 K Ω

Detection Accuracy

10000 μ F

Capacitance Interference Resistance

Measurement Specifications

Parameter	Range
Grounding Impedance	0-50k Ω
Insulation Reduction	51-500k Ω
Direct to Ground Voltage	0-300V
AC Series Voltage	0-300V

Operating Environment

Environmental Limits

- Operating Temperature: -30°C to +50°C
- Relative Humidity: < 96%
- Ripple Voltage Coefficient: 2%