DC Insulation Monitoring Device for Charging Piles

This DC insulation monitoring device provides real-time monitoring of ground insulation resistance within a 100-1000 VDC range. It also monitors DC voltage and includes a DC voltage reverse connection alarm function.

ADDITIONAL IMAGES

Product Overview

Advanced Insulation Monitoring

This DC insulation monitoring device is engineered for high-voltage systems, providing real-time detection of insulation resistance between positive/negative poles and the ground. It integrates seamlessly into DC charging piles, photovoltaic systems, and energy storage setups. Using a bridge balance measurement method, it ensures accurate monitoring independent of DC voltage fluctuations or insulation resistance symmetry.

Key Features

Core Capabilities	Real-time Insulation Monitoring, Bridge Balance Measurement, RS485 Modbus Communication, Adaptive Capacitance, DIP Switch Configuration

Technical Specifications

DC Voltage Range

1000 V
Max Monitoring Voltage

Measurement Accuracy

Parameter	Accuracy
Shunt Voltage	d0.2mV + 1.5%
DC Voltage	d2V + 0.3%
Insulation (100-300V)	d8K© + 10%
Insulation (300-1000V)	d8K© + 5%

Insulation Resistance Range	1K© - 10M©
Power Supply	9-30VDC

Installation & Environment

Mounting Options

35mm DIN Rail • Screw Mount

Operating Temperature	-40°C to 70°C
Physical Dimensions	90mm x 145mm x 40mm

Applications

Primary Applications

- EV DC Charging Systems
- Photovoltaic Systems
- Energy Storage Systems
- DC Power Grids