

# Dual Channel DC Insulation Resistance Monitor

This dual-channel DC insulation monitor is designed for EV charging piles. It measures insulation resistance from 1K $\Omega$  to 10M $\Omega$  and monitors DC voltage from 100 to 1000Vdc.



## ADDITIONAL IMAGES



## Overview

### Dual Channel DC Insulation Monitor

The JY series is a specialized device designed for real-time, online monitoring of insulation resistance in DC floating systems. Featuring two independently controlled channels, it allows for simultaneous monitoring of positive and negative poles without interference, even during DC voltage fluctuations. This robust unit ensures safety in critical infrastructure, such as EV charging piles and photovoltaic systems, by providing continuous resistance and voltage data via RS-485 Modbus communication.

## Key Performance Metrics

### Core Specifications

**1000 V**

Max DC Voltage

**10 M $\Omega$**

Max Resistance

**2 ch**

Monitoring Channels

## Technical Specifications

### Electrical Characteristics

Parameter	Value/Range
DC Voltage Range	0-1000V
Insulation Resistance Range	1K $\Omega$ -1M $\Omega$
Power Supply	9-30VDC
Power Consumption	6W
Off-line pressure test	<2mA

### Accuracy Specifications

- Insulation monitoring accuracy (100-300V): d3%+10%
- Insulation monitoring accuracy (300-1000V): d3%+5%
- Measurement accuracy: d2V+0.3%

## Mechanical & Environmental

### Installation Type

36mm Din Rail • Screw fixation

### Environmental Ratings

Operating Temp: -40°C to 70°C, Storage Temp: -40°C to 125°C

### Physical Dimensions

90mm x 145mm x 40mm

## Features & Connectivity

### Communication Interface

RS485 Modbus

### Typical Applications

EV DC charging system, Photovoltaic system, Energy storage system, DC power grid