

Single Phase DIN Rail Energy Meter

This single-phase energy meter is designed for DIN rail mounting. It accurately measures active energy (kWh) and is suitable for sub-metering applications.



ADDITIONAL IMAGES



Overview

Professional Single-Phase Energy Monitoring

The DEM-3M1C is a versatile single-phase DIN rail energy meter designed for precise measurement in residential, public, and industrial environments. It features bi-directional metering, making it an ideal solution for solar energy applications where monitoring both imported and exported energy is critical. With its high-contrast backlit LCD and optional Modbus communication, it provides a reliable and easy-to-integrate solution for modern energy management systems.

Key Performance Metrics

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100 A

Max Current

1 s

Accuracy Class

230 V

Rated Voltage

1600 imp/kWh

Pulse Constant

Electrical Specifications

Rated Voltage	230 V
Current Range	10A (Base) / 100A (Maximum)
Frequency	50/60Hz
Auxiliary Power Supply	85-275V AC

Measurement Capabilities

Measured Parameters

- Active Energy
- Reactive Energy
- Voltage (RMS)
- Current (RMS)
- Frequency
- Max Demand
- Import/Export Energy (Bi-directional)

Communication & Output

Output Interfaces

- RS-485 Modbus-RTU (Optional)
- Digital Pulse Output (1600imp/kWh)

Physical & Environmental

Environmental Limits

Parameter	Value
Altitude	d2500m
Humidity	0~95% RH (Non-condensing)
Storage Temp	-40°C to +70°C

Mounting Type Standard 35mm DIN Rail

Operating Temperature -25°C to +55°C

Safety & Compliance

Insulation & Protection

- Voltage Tolerance: 2KV (1 min)
- Shock Voltage: 6KV (1.2uS waveform)
- Insulation Resistance: >5M Ω

Certifications & Standards

CE • IEC62053-21 Class 1