



ModBUS Power Meter for 6-channel Continuous Current with OLED display and Hall effect sensors

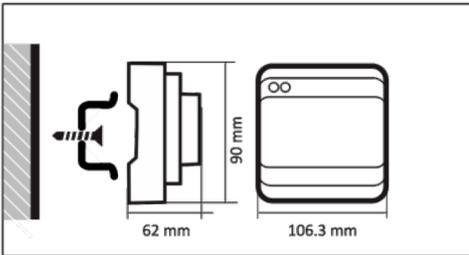
KET-MDC-416

Applications

Monitoring consumption

- Oled graphic display
- Small Hall Sensor
- Integrated calibration menu
- ModBUS RTU protocol

The **KET-MDC-416** is an **energy meter** specifically designed for **direct current (DC)** loads. This advanced device is capable of monitoring up to **6 channels** simultaneously, with currents ranging from **-2500 A to +2500 A**. For signal transduction, the meter utilizes **compact Hall sensors**, connected via **2-meter long cables**, ensuring flexibility in sensor installation and placement. Thanks to the **integrated display**, it is possible to view in real-time for each of the 6 channels the values of **current**, **power**, and the **energy counter**, in addition to the **supply voltage** common to all channels. This feature offers immediate and detailed local consumption monitoring. The KET-MDC-416 is equipped with an **RS485** interface with **ModBUS RTU** protocol, ensuring compatibility with any third-party ModBUS RTU master, facilitating integration into existing supervision and control systems. This energy meter is particularly suitable for applications in the **TelCo** sector, thanks to its **wide supply voltage range**. A distinctive feature of the **KET-MDC-416** is its **self-powering** directly from the voltage used for energy calculation, simplifying installation and reducing the need for external power supplies.



Technical Features

General specifications	Protection Range: Front: IP40; Screw Terminals: IP20 Operative Temperature: -30 ÷ +70 °C
Case	Dimensions: 106,3 x 90 x 62 mm (W x H x D) Mounting: Wall mounting or on DIN rail Required DIN modules: 6 DIN modules Electric Board Type: Industrial or switchboard Material: Blend PC/ABS self extinguishing UL94-V0
Power supply	Supply Voltage: 20 ÷ 60 VDC not isolated Consumption: < 1.5 W @ 20 ÷ 60 VDC Connectors types: Removable screw terminals
Rs485 interface	Supported Protocols: ModBUS RTU Connectors types: Removable screw terminals
Current sensor	Sensor Type: Hall effect probe Current Range: -2500 ÷ +2500 A Typical Sensitivity: 280 V/T Precision: 0.5% Tolerance: 1% Linearity: ± 0.2% Linearity Range: -7.5 +7.5 mT Nonlinearity: ±1% Temperature Drift: < ±200 ppm/°C Noise Spectral Density: <125 nT/sqrt(Hz) (f = 10 Hz ÷ 10 Hz)
Measuring range	Detected: Current and Voltage Calculated: Power and energy for each channel, as well as total values, with energy calculation accuracy of 0.5%.
Certifications	Approvals: CE Security: EN61010-1 Metrology: EN61000-6-2, EN61000-6-4