KET-MDC-416



APPLICATIONS

monitoring consumption

Accounting









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

- 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 Storage Temperature: Relative Humidity:
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-VO
POWER SUPPLY	Supply Voltage: 20 ÷ 60 VDC not isolated Consumption: < 1.5 W @ 20 ÷ 60 VDC Connectors types: Removable screw terminals
RS485 INTERFACE	Channels: Supported Protocols: ModBUS RTU Communication Rate: Isolation: 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	Referends Standard: Approvals: CE Security: EN61010-1 Metrology: EN61000-6-2, EN61000-6-4

