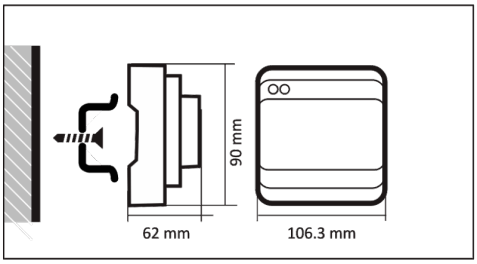
kerberos

IP40 | RS485 ModBUS | 12-24 VAC 12-20 VDC

KET-MDC-416

Applications

Monitoring consumption



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