



# Metering module ZM8C-P with add-on ZM8C

Modules for high quality electrical data collection via Modbus/RTU

## Application

Flexible low voltage energy metering for:

- active electrical loads and energies
- effective voltages and currents
- power factors
- frequency
- event based data acquisition mode with configurable filter for each channel

These data are made available via Modbus/RTU or an event-based RS485 mode.

## Technology

The ZM8C-P is the main module. It provides 2x 4 inputs for current transformers via two RJ45 slots, as well as power supply and signal inputs for the line voltages. The ZM8C add-on module is identical, but does not include the power-supply and line-voltage unit. A ZM8C-P supplies power for up to 4 ZM8C, and the voltage references for up to 20 ZM8C (extra 5 VDC power supply needed). To this end, the modules are placed next to each other on a DIN rail, connected via the H-Bus inside the DIN rail. Thus, these modules together can process the above application data from up to 40 or 168 current transformers respectively.

## Characteristics

- practical plug connection for ultra compact deZem current transformers of all sizes
- mounting on a standard DIN rail
- data exchange, power supply and transmission of data and analogue signals over H-Bus inside the DIN rail **or** via cable (10-pin slot)
- configuration via software tool **or** with two intuitive buttons with LED feedback



## Technical data

supply voltage: via ZM8CP or external 5 VDC  
 current consumption: typ. 45 mA, max. 80 mA per unit  
 dimensions ZM8C: (height x width x length) 90 x 55 x 61 mm, ZM8C-: 90 x 108 x 61 mm  
 operating temperature: -5 – 55°C (non-condensing)  
 measurement tolerance of +/-1,0 %, corresponding to Class 1 of standard IEC 61557-12

## Phys. interfaces

1x 16-pin H-Bus inside DIN rail  
 1x 10-pin plug to connect additional ZM8C by cable  
 1x screw-type terminal for RS485 (Modbus/RTU)  
 1x screw-type terminal for 5 VDC

## ZM8C-P only:

input voltages: L1 to N: 90–265 VAC/ 120–385 VDC, L2/L3 to N: 0–265 VAC/ 0–385 VDC  
 power consumption L1 to N: typ. 1.8 VA, max. 2.5 VA, when extended by 4 x ZM8C: max. 8 VA; L2/L3 to N: max. 0.2 VA

Subject to technical modifications  
 Version 1.2, July 2020

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