

System Components

M-Bus Level Converter



EM-PW 3 / EM-PW 20 / EM-PW 20 TCP / EM-PW 100 TCP

M-Bus Level Converter

M-Bus level converter to connect M-Bus meters with the FRAKO Energy Information System.

Description

The M-Bus (Meter-Bus) is a two-wire fieldbus, mainly developed to transmit energy consumption data. The market offers a wide spectrum of energy meters for a variety of media.

By using the M-bus level converter, up to 3, 20 or 100 M-Bus meters can be integrated in the FRAKO Energy Management System.

In practice the consumption data from heat meters, water meters, electricity meters, gas meters etc. are read out via remote inquiry. The usual readout cycle is once a month.

- With the coupling of the M-Bus meter to the FRAKO Energy Information System, current measurement readings and 15 minute graphs can be shown. The particular M-Bus meter must allow fast interrogation cycles
- The analysis of the recorded measurement data can be carried out by using the visualization software EMVIS 3000 or the reporting software EMIS® Report
- Consumption characteristics become transparent and thus allow an optimization of the energy consumption
- Easy to handle connection of the M-Bus meter via level converter - direct serial - to the FRAKO Central Unit EMIS® 1500 or via the internal network (Ethernet TCP/IP) by means of EM-Com-Server
- M-Bus meters can be evaluated together with all other FRAKO Energy Management devices

// Technical Data

Power supply	
Operating voltage	10.8 up to 28 V DC, 10.8 up to 28 V AC
Power consumption	EM-PW 3: max. 3.6 W EM-PW 20: max. 7 W
M-Bus Interface	
Voltage	EM-PW 3: 33 V (without load) EM-PW 20: 32 V (without load)
Standby current	EM-PW 3: max. 4.5 mA (3 standard loads) EM-PW 20: max. 30 mA (20 standard loads)
Internal resistance	Approx. 100 Ω
Overcurrent threshold	EM-PW 3: 35 mA; EM-PW 20: 60 mA
Transmission rate	300 to 9.600 Baud (RS-232 C)
Mechanical construction	
Dimensions	56 x 78 x 117 mm (W x H x D)
Ingress protection	IP40
Installation	On standard rail 35 mm according to DIN EN 50022
Operating conditions	
Ambient temperature	0 °C up to +50 °C

// Versions

Article-No.	Type	Max. number of M-Bus participants
29-20078	EM-PW 3	3 (RS-232 interface)
29-20079	EM-PW 20	20 (RS-232 interface)
29-20126	EM-PW 20 TCP	20 (Ethernet interface (TCP/IP))
29-20127	EM-PW 100 TCP	100 (Ethernet interface (TCP/IP))