

## BIALON MPW-25/IP

Ethernet/M-Bus level converter



- M-Bus level converter for up to 25 M-Bus endpoints (standard load: 1.5 mA)
- 10/100 Mbps Ethernet
- Static or dynamic IP address
- Ethernet interface and M-Bus electrically isolated
- RS232 configuration interface
- M-Bus transfer rates 300 to 9600 baud
- Full M-Bus voltage of 36 V to 42 V
- Bit refresh
- Echo suppress
- Overcurrent protection
- Overvoltage protection
- 4 parallel M-Bus connections
- Optionally available with 230 V AC or 24 V AC/DC voltage supply
- Housing as per EN 50022 for installation on DIN support rails

The M-Bus level converter BIALON MPW-25/IP lets you connect up to 25 M-Bus endpoints with a standard load of 1.5 mA each to an M-Bus Master via an Ethernet connection. The M-Bus Master can be, e.g., a PC or an embedded controller. The level converter translates the signals from the M-Bus Master on the Ethernet interface to M-Bus signals, and vice-versa.

Up to 250 MPW-25/IP can be connected to a PC-based M-Bus Master. The IP addresses on the level converter are assigned to virtual COM ports on the master. If needed, they can be grouped on the M-Bus Master via an additional program to use a single COM port. This means that an M-Bus Master program that only works with one COM port can communicate simultaneously with all M-Bus endpoints connected via the individual level converters.

The level converter has overload protection and is thus short-circuit protected. The trip threshold is 58 mA. Additionally, the M-Bus interface has overvoltage protection on the bus side.

The LEDs indicate the major operational and malfunction states, such as power supply, send or receive data, and bus overload.

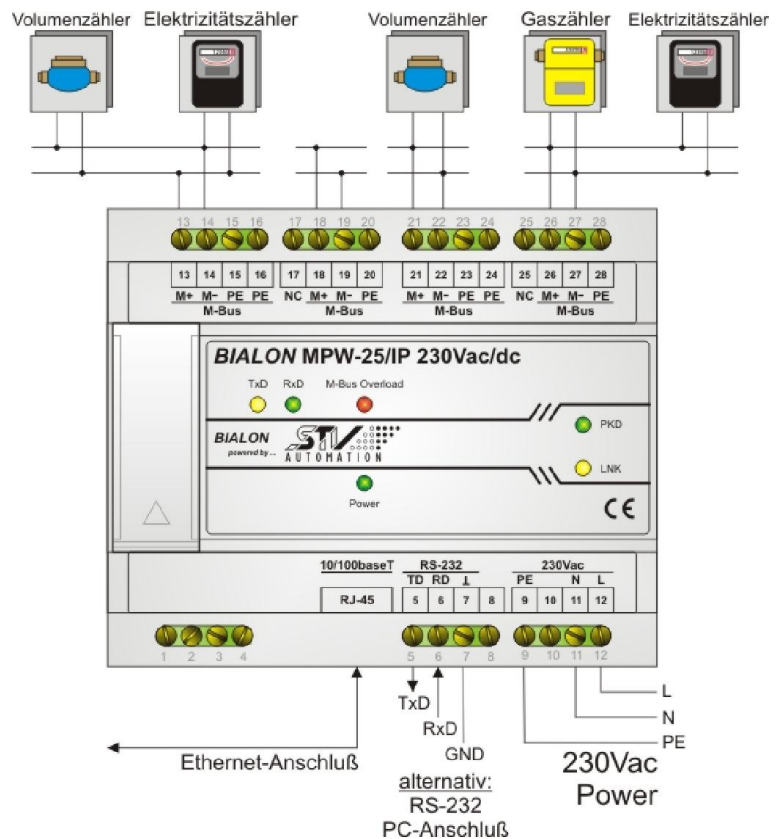
The M-Bus BIALON MPW-25/IP level converter is available in two variants with a 230 V AC or 24 V AC/DC power supply.

### Order details

Description	Order number
BIALON MPW-25/IP 230 V AC	095062
BIALON MPW-25/IP 24 V AC/DC	095063

## Properties of the M-Bus system:

- standardised European field bus (DIN EN13757-2 and -3; EN1434-3)
- Wire pair bus with power supply to bus nodes (M-Bus standard load = 1.5 mA)
- M-Bus is reverse polarity protected
- Acquisition of consumption data (heat, water, gas, electricity, etc.)
- Communication with M-Bus sensors and actuators supported
- Energy monitoring and optimisation
- For use in industrial and domestic applications
- No special requirements for the bus cable (installation wiring or phone wire sufficient)
- Optional wiring topology (star, tree, bus)
- Long range (up to several kilometres)
- Good availability of system components
- Good cost/performance ratio



## Technical data

Supply voltage	110 V to 250 V AC or 20 V to 28 V AC/DC
M-Bus voltage	36 V - 42 V
max. M-Bus idle current	37.5 mA (25 standard loads)
Excess current threshold	<58 mA
Electrical isolation	between the power supply, Ethernet and M-Bus
Ethernet	10/100BaseT
Transfer rate	M-Bus 300 ... 9600 baud
Displays	LED green: power on LED yellow: Transmit M-Bus LED green: Receive M-Bus LED red: Bus Overload LED green: PKD (Packet Detect → IP port) LED yellow: LNK (Link Status → IP port)
M-Bus connection	4 separate terminal pairs max. 2.5 mm <sup>2</sup>
Ethernet connection	Western plug RJ-45
Operating temperature	0 ... 40 °C
Relative humidity	0 ... 90 % (non-condensing)
Housing	as per EN 50022 for installation on DIN support rails, 6 separation units
Protection type	IP 20 as per DIN EN 60529
Dimensions (L x W x H)	108 x 90 x 66 mm (6 SU)