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M-BUS LEVEL CONVERTER 60

The 1.ETRSEQ.0003 M-Bus level converter allows interfacing to a network of devices compliant with the M-Bus standard (EN 13757-2 Physical Layer) up to a maximum of 60 slaves.

It is designed to be used in conjunction with 1.ETRSEQ.0101 to extend the MBUS network and connect additional devices, or as a traditional M-Bus repeater.

Additionally it can be used together with a specific PC software for reading data on site.

FLEXIBLE AND COMPLETE

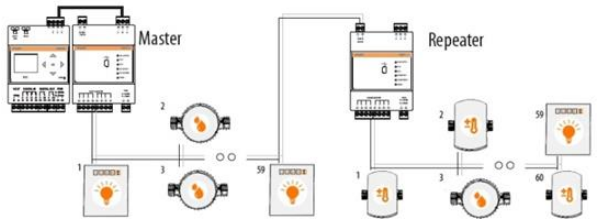
It can be used as a master in an M-Bus network connected through the dedicated port to the data logger, or as a repeater in order to extend an existing M-Bus network with up to 60 additional devices.

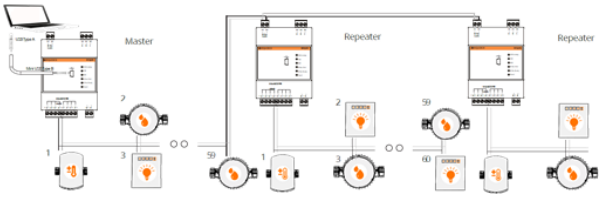
Its modularity allows the optimization of the reading system cost.

In "MASTER" mode, the device allows data loggers (for example 1.ETRSEQ.0051) to communicate with M-Bus devices connected to the M-Bus Master port. The data logger must be connected to the level converter via the dedicated bus.

In "REPEATER/SLAVE" mode, the device works as a signal amplifier/regenerator, thus allowing for the extension of an existing M-Bus network in terms of distance and total devices connected.

CONNECTION EXAMPLES





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ELECTRICAL CHARACTERISTICS

Rated voltage	24 Vdc +/-10% (rev. HW 1.0 or if not specified) 24 Vdc +/-10%, 24 Vac (min. 20 Vac, max. 40 Vac) for HW 2.0 versions
Installation category	Class III
Rated consumption	3 W + (0.07* number of M-Bus slave)
Maximum consumption	12 W

MECHANICAL CHARACTERISTICS

Operating temperature range	-10 °C to +55 °C
Storage temperature range	-25 °C to +65 °C
Dimensions	90 x 71 x 62 mm (H x L x D) – DIN
Installation type	35 mm DIN bar (EN 60715)
Protection rating	IP20 (EN 60529)
Connections	M-Bus slave: for connection as a repeater / extender M-Bus master: for the connection to the M-Bus meters Mini-USB Type B: for connection to PC software

M-BUS SECTION

Reference standard	EN 13757-2 (Physical Layer)
Baud rate	Min. 300 bps – Max. 9600 bps
M-Bus-RS232 isolation	1 KV AC
M-Bus-USB isolation	1 KV AC
Max. number of M-Bus devices	60
Max. number of repeaters	Unlimited in stand-alone mode for reading current data via an RS232 or USB connection Four (4) as a slave of data logger (1.ETRSEQ.0051)
Transmission speed	Minimum: 300 bps Typical: 2400 bps Maximum: 9600 bps
Bus voltage	Min. 21 V Max. 42 V
Short circuit protection	Yes

SIGNALING LEDs

USB Activity (orange LED)	Connection status with PC software
TXD (green LED)	Transmission status on the M-Bus master
RXD (green LED)	Reception status from the M-Bus master
M-Bus ERROR (red led)	Indicates a short circuit or the overloading of the M-Bus
M-Bus Ready (green led)	Indicates the correct polarization of the M-Bus
POWER (red led)	Indicates the correct power supply of the device

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METERING EXPERTISE

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