

### M-BUS LEVEL CONVERTER 250



The M-Bus level converter SIN.EQLC250 from the EQUOBOX family allows interfacing to a network of M-Bus compliant devices (EN13757-2 Physical Layer) and supports up to 250 slaves\*.

It is designed to be used in conjunction with SIN.EQRTUxxx dataloggers. It can be used in stand-alone mode via RS232 / RS485 port or as an M-Bus repeater.

Typically used with data logger SIN.EQRTU1, SIN.EQRTU4, SIN.EQRTU1T / X or SIN.EQRTUEVO1T.

\* Slave means an M-Bus load unit ( $\leq 1.5$  mA)

### FLEXIBLE

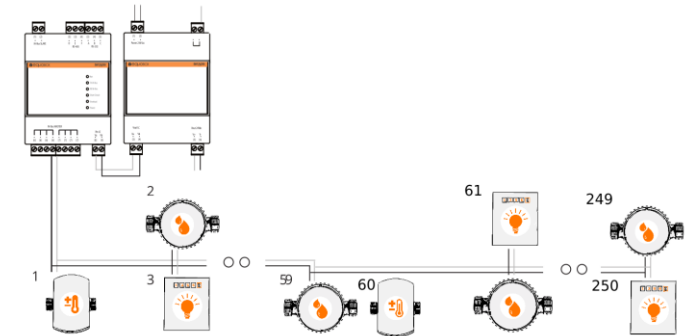
It can be used as master in an M-Bus network of 250 devices connected on a single line.

It can be connected:

- via RS-232 / RS-485 serial port to a data logger or software
- via the M-Bus slave port as a repeater to extend an existing M-Bus network by a further 250 devices.

The device has a 24V DC power output that can supply a SIN.EQRTUxxx datalogger.

### CONNECTION EXAMPLE



**Datalogger  
&  
Software**

RS232  
RS485  
M-Bus Slave

## ELECTRICAL FEATURES

<b>Power supply</b>	110 ... 240 VAC, 47 ... 63 Hz through dedicated power supply included
<b>Installation category</b>	II Class as per EN 62368-1
<b>Rated consumption</b>	6W + (0.07W * number of M-Bus slave)
<b>Maximum consumption</b>	45W, 45 VA Vout: DC 24V, max 15 VA

## MECHANICAL FEATURES

<b>Operating temperature range</b>	From -20°C to +55°C
<b>Storage</b>	From -25°C to +65°C
<b>Materials and colors</b>	PC+ASA, RAL9010 (white)
<b>Dimensions</b>	(2x) 110x71x62 mm (HxLxD) – including terminals
<b>Installation type</b>	35mm DIN bar (EN60715)
<b>Protection degree</b>	IP20 (EN60529)
<b>EU conformity (CE)</b>	MOD 07 AA Rev. 0
<b>Connections</b>	110 ... 240 VAC power supply Functional Earth Vin LC/Vout LC: Power supply for level converter/repeater Vout 24 V DC (Max 15 VA) M-Bus Slave: to connect as a repeater/extender RS-485: connection for datalogger and software RS-232: connection for datalogger and software M-Bus Master: for connection to the M-Bus meter network Firmware update button
<b>Buttons</b>	

## M-BUS SECTION

<b>Reference standard</b>	EN13757-2 (Physical Layer)
<b>Baudrate</b>	Min. 300bps – Max. 9600bps
<b>Max number of M-Bus devices</b>	250 ( $\leq 1,5$ mA)
<b>Max number of Repeater</b>	Up to 6 with parallel connection
<b>Voltage on the Bus</b>	39V
<b>Short circuit protection</b>	Yes
<b>Galvanic isolation</b>	Yes (See EN13757-2)
<b>Galvanic isolation M-Bus Master - M-Bus Slave</b>	Yes
<b>Echo Cancellation</b>	Yes
<b>Collision Detect with Break-Signalling</b>	Yes

## SIGNALING LEDs

<b>Run (Green Led)</b>	Operating status of the device
<b>TX M-Bus (Green Led)</b>	M-Bus Master transmission status
<b>RX M-Bus (Orange Led)</b>	M-Bus Master reception status
<b>Short Circuit (Red Led)</b>	Indicates short-circuit of the M-Bus Master line
<b>Overload (Orange)</b>	Indicates overload of the M-Bus Master line
<b>Power (Green Led)</b>	Indicates the correct power supply of the device

## PACKAGE

<b>Level Converter + QuickStart Guide</b>	0,166 Kg
<b>Packaging</b>	0,055 kg

## NATIONAL SAFETY REGULATIONS

Failure to comply with national safety regulations may result in personal injury and property damage. Observe national provisions and comply with the appropriate safety regulations.  
This equipment is not suitable for use in locations where children are likely to be present.