



Pw²⁵⁰

- M-Bus Converter and Repeater for 250 Slaves
- USB, Ethernet, 2x RS232C, RS485
- Repeater for M-Bus extension for 250 slaves or cable network
- Intelligent interface management
- Integrated wide input power supply 110 ... 250VAC

The versatile level converter

The Pw²⁵⁰ is a transparent level converter for 250 M-Bus slaves with an abundance of interfaces and functions. Whether you read your meter with a DDC, involving them directly in your building control or want to access the data on a PC, the Pw²⁵⁰ with its RS232C, RS485, USB and TCP / IP interfaces offers all options. Another unique feature related to the large number of interfaces is their intelligent management. By this the Pw²⁵⁰ allows you to connect multiple external controllers simultaneously. The access to the M-Bus is monitored by a logic, that always connects only one interface at a time. By the additionally implemented repeater function, the Pw²⁵⁰ becomes the true all-rounder among the large M-Bus level converters. →



Operation and Features

The Pw²⁵⁰ is a digital M-Bus level converter for up to 250 M-Bus slaves. The integrated processor takes over the control of the short-circuit protection, the collision detection and the bit time recovery. As one of few level converters for 250 meters the Pw²⁵⁰ provides communication speeds of up to 38400 baud. Different colored LEDs on the front of the housing inform you about the device status and indicate communication. Another LED shows that one of the available interfaces is in access to the M-Bus. Here, the intelligent controller ensures that either the RS232C or RS485 or USB or TCP / IP interface is switched to the M-Bus. After completing the communication the M-Bus is released and reallocated according to the principle „first come, first served.“. The installation of the device is very easy. With the integrated wide range power supply (110 .. 250VAC) it fits to the power grid nearly worldwide. The ABS plastic housing can be mounted either on the wall or with optional adapters on the DIN rail. If you are using the Pw²⁵⁰ as a repeater for an existing M-Bus system, it enables the connection of 250 M-Bus slaves or a significant extension of the cable network.

Specifications

Operating voltage	110 .. 240 VAC, 47 .. 63 Hz
Power consumption	max. 100W
Temperature range	0 .. 45°C
M-Bus voltage	42 V (Mark), 28V (Space)
M-Bus Standby current	max. 375 mA
Overcurrent threshold	> 500 mA
Bus impedance	8 Ω
M-Bus baud rate	300 .. 38400 Baud
Maximum cable length for recommended cable type JYSTY 1 x 2 x 0,8 mm	Total (all wires): 1km (9600 baud), 4km (2400 baud), 10km (300 baud) Max. distance to slave: 350 m (all 250 slaves at the end of the cable) Max. distance to slave: 900 m (250 slaves equally distributed)
Galvanic isolation	All interface are isolated from M-Bus and power supply. The Repeater input is additionally isolated from the other interfaces.
Housing	light grey ABS plastic, protection class IP 52 H x B x T: 229 x 204 x 76 mm mounting on DIN rail or wall
LED status indicators	Power, communication master, slave, warning, short circuit M-Bus, M-Bus activity
Interfaces	10/100 Mbit Ethernet, USB device, RS232 (D-SUB9), RS232C (terminals), RS485, Repeater (M-Bus IN)

Ordering

Article number	Description
PW250	M-Bus Level Converter and Repeater for 250 slaves
KA003	Power cable 2m, with German plug according to CEE 7/4, grey
KA USB AB	USB cable A to B plug/plug, length = 1m, grey

Article number	Description
GHZ TSH35-2	Rail mounting set TH35 incl. screws
GHZ LOCK	Cylinder lock incl. 2 keys
KA PATCH .5E RJ45 1M	Network patch cable CAT5E FTP, Length = 1m, grey