Pw¹⁰⁰
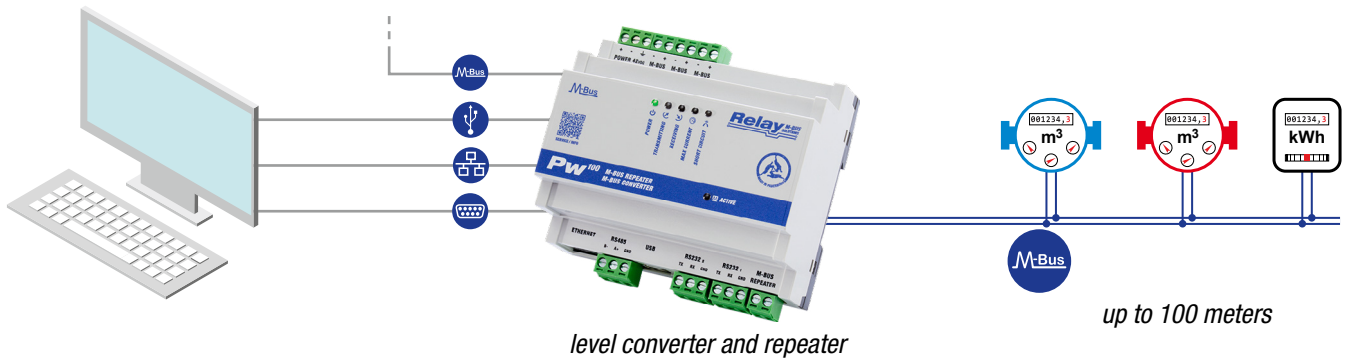
- ◉ M-Bus Level Converter and Repeater for 100 Slaves
- ◉ USB, Ethernet, 2x RS232C, RS485
- ◉ Repeater for M-Bus extension for 100 slaves or cable network
- ◉ Intelligent interface management
- ◉ Status indicated by 6 LEDs
- ◉ Mounting on DIN rail

The compact allrounder

The Pw¹⁰⁰ is a transparent level converter for 100 M-Bus slaves with an abundance of interfaces and functions. Whether you read your meters with a DDC, involving them directly in your building control or want to access the data on a PC, the Pw¹⁰⁰ 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 Pw¹⁰⁰ 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 Pw¹⁰⁰ becomes the true allrounder among our compact DIN rail M-Bus level converters. →

level converter and repeater

up to 100 meters

Operation and Features

The Pw[100] is a digital M-Bus level converter for up to 100 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 100 meters the Pw[100] 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.". Being installed the Pw[100] trades in all advantages of its compact DIN rail housing and fits perfectly into your switch cabinet. If you are using the Pw[100] as a repeater for an existing M-Bus system, it enables the connection of 100 M-Bus slaves or a significant extension of the cable network.

Specifications

Operating voltage	42,0 .. 43,5 VDC
Power consumption	max. 15W
Temperature range	0 .. 50°C
M-Bus voltage	42 V (Mark), 28V (Space)
M-Bus Standby current	max. 150 mA
Overcurrent threshold	> 200 mA
Bus impedance	5 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: 1000 m (all 100 slaves at the end of the cable)
	Max. distance to slave: 2000 m (100 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 and black PC plastic protection class IP 30 H x B x T: 105 x 90 x 60 mm mounting on DIN rail
LED status indicators	Power, communication master, slave, warning, short circuit M-Bus, M-Bus activity
Interfaces	10/100 Mbit Ethernet, USB device, 2 x RS232 (terminals), RS485, Repeater (M-Bus IN)

Ordering

Article number	Description
PW100	M-Bus Level Converter and Repeater for 100 slaves
NT016	Power supply 42VDC, 15W, mounting on DIN rail
KA USB AB	USB cable A to B plug/plug, length = 1m, grey

Article number	Description
KA006	Serial DSUB 9 cable with 3 open lines
KA PATCH.5E RJ45 1M	Network patch cable CAT5E FTP, Length = 1m, grey