



METERING SOLUTIONS



## AT-WMBUS-05-3

COMMUNICATION RETRANSMITTER  
WIRELESS M-BUS

The AT-WMBUS-05-3 retransmitter is designed for wireless relay of metering data. The device receives measurement data packets from transmission equipment installed on various utilities and relays the data immediately to a hub connected to a telemetry server. The data packets are transmitted over Wireless M-Bus acc. to PN-EN 13757-4 which is fully compatible with a wide range of equipment within the remote data reading and transmission structure. The retransmitter greatly extends the readout collection range and increases the number of meters read by a receiver hub.

The device is powered by 230 V mains which allows continuous data frame retransmission.

### APPLICATION

The retransmitter retransmits measurement data packets for various utilities types in industrial and urban areas. It is applied in remote telemetry reading and transmission systems to increase the readout range.





## KEY FEATURES

- Installed on flat bases with quick mount plugs or screws
- Integrated internal antenna
- Operates in the 868.95 MHz licence free RF band
- 230 V mains power supply
- The transmission line can be extended with a maximum of 8 retransmitters
- Continuous operation
- Easy and fast TTL value setup with jumpers
- Full compatibility with remote measurement data reading and transmission devices over Wireless M-Bus



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## CONFIGURATION

The retransmitter allows configuring the RF frame TTL with a system of jumpers. The TTL value defines the RF frame transmission line to the hub over other retransmitters. The frames are relayed from higher TTL devices to lower TTL devices, with a total maximum number of 8 retransmissions.

Each RF frame is modified at each retransmitter by adding the correct data bytes number to the original TX device frame:

- First retransmission cycle – 12 data bytes;
- Second and each next retransmission cycle – 4 data bytes.

Table 1. TECHNICAL SPECIFICATIONS

Retransmitter	AT-WMBUS-05-3
Mounting	Quick mount plugs (2 pcs.)
Dimensions	110 x 81 x 40 mm
Weight	0,172 kg
Communication protocol	Wireless M-Bus (T1)
Modulation	FSK, frequency deviation: $\pm 50$ kHz
Operating frequency	868,95 MHz
Transmitter power output	10 mW / 50 $\Omega$
Receiver sensitivity	- 105 dBm
Power supply	230 V mains
Operating temperature	-20 °C ÷ 55 °C
Protection rating	IP 54
Range in open areas	600 m

Table 2. TTL CONFIGURATON

Jumper location	TTL value
	1
	2
	3
	4
	5
	6
	7
	8



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