Wireless Modbus-to-Modbus bridge

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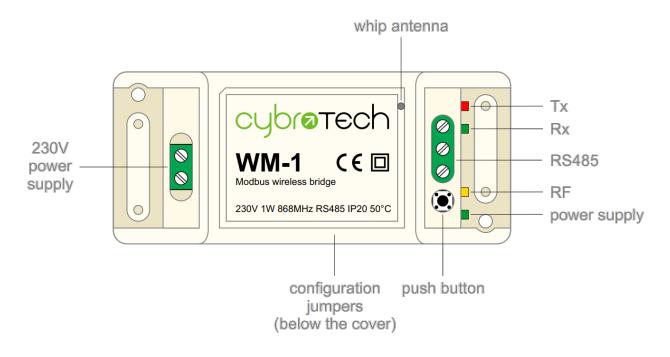
| Model number: | WM-1 |
|---------------|-----------------|
| Frequency: | ISM 868MHz (EU) |
| Dimensions: | 93x45x27 mm |

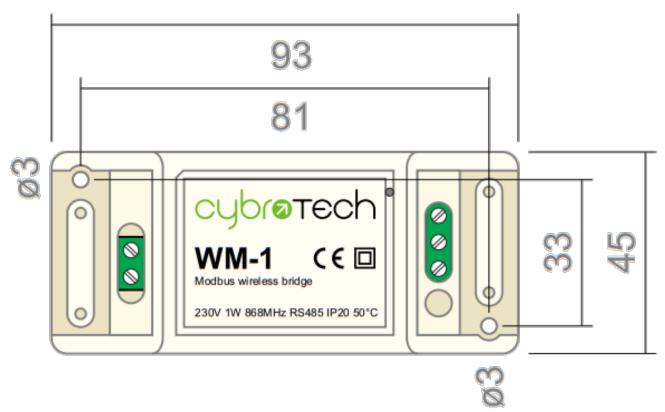
Applications

 Replacement for RS485 wiring solution with wireless. Optimal for long range Modbus RTU serial communications with half duplex configuration.

Installation and mounting

- Carefully open WM-1 module and configure serial communication with jumpers. (Default configuration is 9600bps, 8N1 with normal timeout)
- Place WM-1 module at least 10cm from other objects. Installation is not recommended inside metal cabinets.
- Connect RS485 terminals to WM-1 RS485 terminals
 - A A
 - ∘ B B
 - ∘ C GND
- Connect to 230V power supply
- · Configure radio pairing





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Features

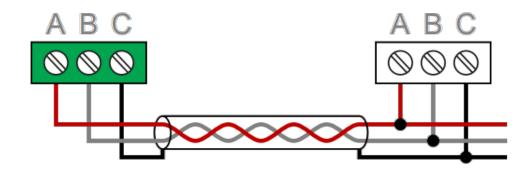
- replacement for RS485 wiring
- Modbus RTU serial protocol
- wired/wireless combinations
- very long range, no hopping
- protected private connection
- multiple slaves per device
- multiple addressable groups

Technical specification

| Power supply: | 230V, 50/60Hz, 1W | |
|------------------------|-------------------|--|
| Ingress protection: | IP20 | |
| Operating temperature: | -2050°C | |
| Storage temperature: | -4085°C | |
| Relative humidity: | 085% n/c | |

Terminals and wiring

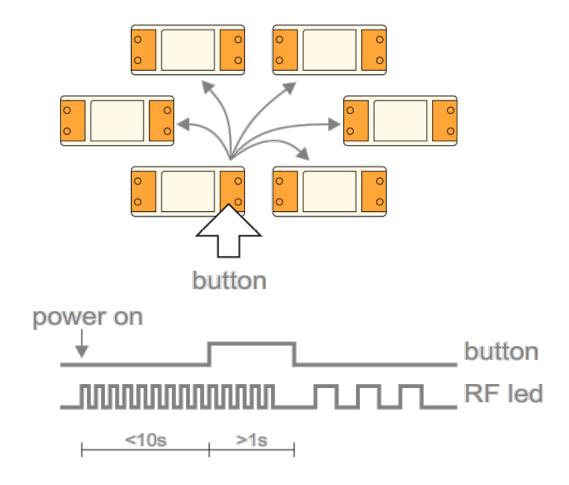
| | To power sensor | В | RS485 bus |
|--|-----------------|--------|-----------|
| | | С | |
| | To power supply | L N | 230V AC |



Radio configuration

Create new secure group

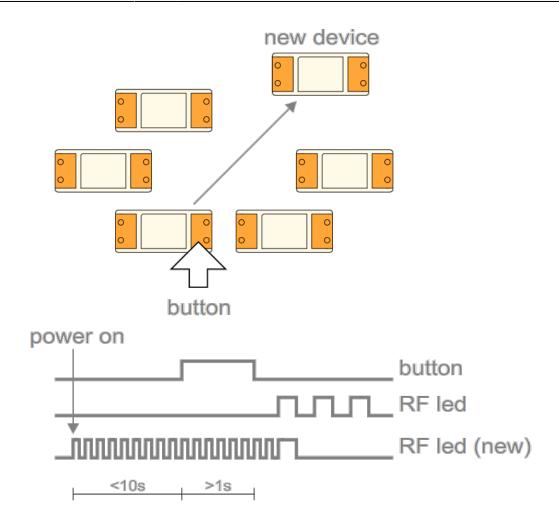
- * turn on all devices as the same time
- * within 10 seconds, while RF LED is blinking, press and hold button on one of the devices
- * after a second, the new address is randomly generated and sent to all devices. RF LED will blink 3 times to confirm the new address.



Add new device to the group

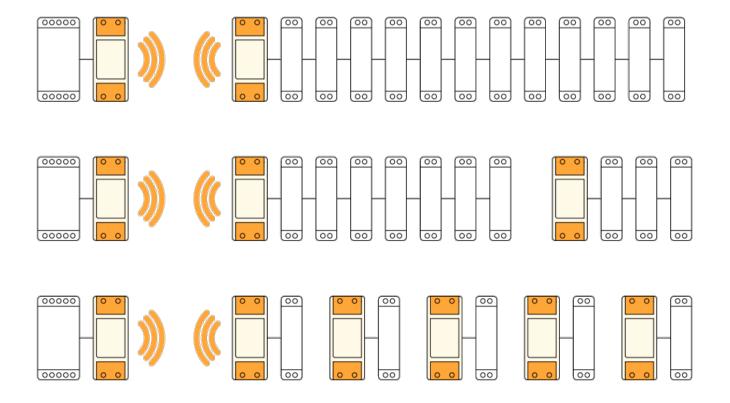
- * turn on the device
- * within 10 seconds, press and hold button on one of the existing devices
- * after a second, the existing group address is sent to the new device. RF LED will blink 3 times to confirm the address is sent.

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Topology examples

- * Modbus master, connected to 12 slaves using a pair of WM-1 devices
- * Modbus master, connected to 10 slaves, organized in two groups
- * Modbus master, connected to 5 slaves, each one having local WM-1 device



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