

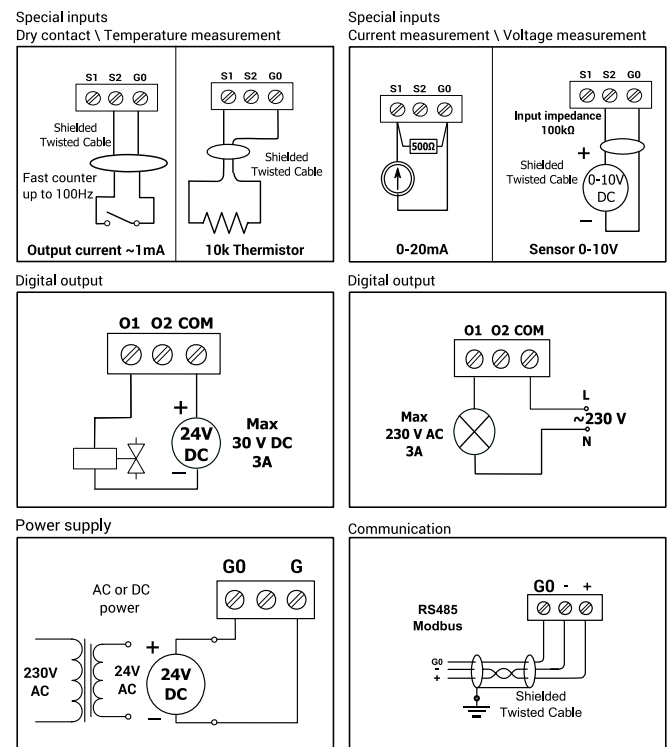
iSMA-B-W0202 has been built to allow extension of RS485 bus using wireless technology wherever use of network cable is impossible or unprofitable. Use of two iSMA-B-W0202 allows to build the wireless 'bridge' for the RS485 by building wireless remote island (one or more) for devices communicate via Modbus RTU / ASCII - eg. iSMA-B-MIX18 or iSMA-B-MIX38. iSMA-B-W0202 in addition to the RS-485 port and wireless port is equipped with 2SI (Special Inputs) and 2DO (Digital Outputs max. 230 VAC / 30VDC 3A), which allows to use device as an I/O module or light controller communicating in Modbus RTU / ASCII . Implemented algorithm in the processor allows user to choice one of 3 different modes:

- Modbus Bridge
- Modbus Bridge and I/O module (both DO work independent of the state of the inputs SI)
- Modbus Bridge and light controller (DO work in direct connection with SI) - there are 3 sub-modes of operation: Monostable Relay, Bistable Relay, Time Relay.

iSMA-B-W0202 is also equipped with a micro USB port which allows to configure the device without the use of an external power supply (the device is powered through the USB port). This solution gives you an easy way , using 2 laptops, carry out the tests within the existing facility.



Wiring diagrams



Key Features

- ✓ High transmit power and high sensitivity
- ✓ No license required for the radio band
- ✓ USB for configuration
- ✓ 1 RS485 port (Modbus)
- ✓ 2 Special Inputs
- ✓ 2 Relay Outputs
- ✓ LEDs indicating the state of the inputs and outputs
- ✓ Fast processor with ARM core



iSMA-B-W0202

Specifications

Platform

- ARM Cortex-M3

Communication

- RS485 Interface
- USB Device Interface
- Radio Interface

Local IO

- S1,S2 – Special Inputs
- O1,O2 – Digital Outputs (relays)

Special inputs

All universal inputs have 12-bit resolution which support the following types of inputs:

- Temperature input support the following types of sensors: 10K3A1, 10K4A1, Carel 10K, 20K6A1, 2.2K3A1, 3K3A1, 30K6A1, SIE1, TAC1, SAT1, accuracy $\pm 0,1^{\circ}\text{C}$ at 25°C
- Voltage input 0-10VDC
 - input resistance 100k Ω
 - accuracy $\pm 50\text{mV}$
- Resistive input 0-1000k Ω
- Dry contact input

Digital Outputs

- Relay output max. 3A, 250V AC / 30 VDC

Power supply

- 24V AC/DC

Housing

- Size 17,5x90x58 mm
- Construction: Plastic, self-extinguishing (PC/ABS)
- DIN rail mounting (DIN EN 50022 norm)
- Cooling: internal air circulation

Environment

- Operating temperature: -10°C to 50°C
- Storage temperature: -40°C to 85°C
- Relative humidity: 5 - 95%, without condensation
- Ingress Protection Rating: IP40 – for indoor installation

Radio

- Frequency 868 MHz
- Max output power: +20 dBm, 100 mW
- Sensitivity: -120 dBm
- Encryption: AES-128
- Speed: 115 kb/s
- External antenna (SMA socket)

