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RS485 to 2xRelay

№100859

The device is commonly used for relay control through RS485 communication interface, standard MODBUS RTU or simplified protocol.

The RS485 interface used allows connecting up to 32 controllers in a communication line up to 1200m.

It is applicable for control of industrial and domestic appliances such as: light fittings, electric lock control, garage doors control and etc.

***RS485 to 2xRelay** features*

*- 2-Wire connection by **RS485***
- Reverse-voltage protection
*- 2 relay outputs: **10A 250V***
- LED indication for:
- *Power supply*
- *Receiving data*
- *Sending data*
- *Relay state*

- Communication protocol:
- *MODBUS RTU*
- *Simplified*

*- Programming via **RS485 Relay Config** free software for Windows XP, 7, 8, 8.1 and 10*
*- Device supply voltage: **12VDC 200mA***
- Size: 83mm x 30mm
*- Suitable for mounting in DIN rail box – **Z-103***

Description

- device for primary load control at distance up to 1200m through an **RS485** communication interface
- terminal **J1**
  - **VCC** – power supply **12V DC**
  - **GND** – ground
- terminal **J2**
  - **GND** – ground
  - **B** – **RS485** signal line **B**
  - **A** – **RS485** signal line **A**
- terminal **J3** – **relay 1** outputs
- terminal **J4** – **relay 2** outputs

Signalling:
- red LED **D4 (PWR)** – power supply is on
- yellow LED **D8 (RX)** – receiving data
- green LED **D7 (TX)** – sending data
- green LED **D2 (RELAY1)** – activated **relay 1**
- green LED **D6 (RELAY2)** – activated **relay 2**

Communication parameters:
- 8 Data, 1 Stop, No Parity
- Serial Speed: **9600kbps**

Communication protocol:
- *MODBUS RTU*
  - command for reading state – **0x01**
  - command for saving state – **0x05**
- *Simplified protocol*
  - enable output **XX** – 0xFF 0xXX 0x01 or 255 xx 1
  - disable output **XX** – 0xFF 0xXX 0x00 or 255 xx 0
  - read output **XX** – 0xFF 0xXX 0x02 or 255 xx 2

***Note:** XX is the particular output address*

Programming:
1. *Push button PROG while device is turned off*
2. *Connect the device to a power supply*
3. *Green LED starts flashing at 1-second interval*
4. *Set device's address and communication protocol with **RS485 Relay Config** application*
5. *Successful programming is indicated by 10 green LED flashings at 0.1-sec interval*

Example of Device Wiring Diagram