

easyLAN REL9 – 8-Channel Relay Module

Description

The easyLAN REL9 module (hereinafter referred to as the device) is designed for controlling external equipment using an external digital input module. The device has 9 independent relay channels. The output management signal is transmitted over Ethernet via TCP/IP.

Specifications

| Description | Value |
|--------------------------------|----------------------------|
| Number of independent relay | 9 |
| Switched relay channel current | 3 A |
| Switched relay channel voltage | up to 250 V |
| Physical control interface | Ethernet (10/100 Mbit/sec) |
| Power supply | +10...+24 V |
| Consumption current, less than | 300 mA |
| Operating temperature | -20...+45°C |
| Operating relative humidity | 5...80% |
| Dimensions, mm | 106,25×95,2×57,5 |
| Weight | 220 g |
| Protection level | IP20 |



Purpose of buttons, connectors and indicators

The front panel consists of the status indicators and the multifunctional "RESET" button. Connectors for connecting to the Ethernet network, to the power module and to the output channels are situated on the lower board.

The "WDT" (green) indicator shows the power supply availability and the connection status:

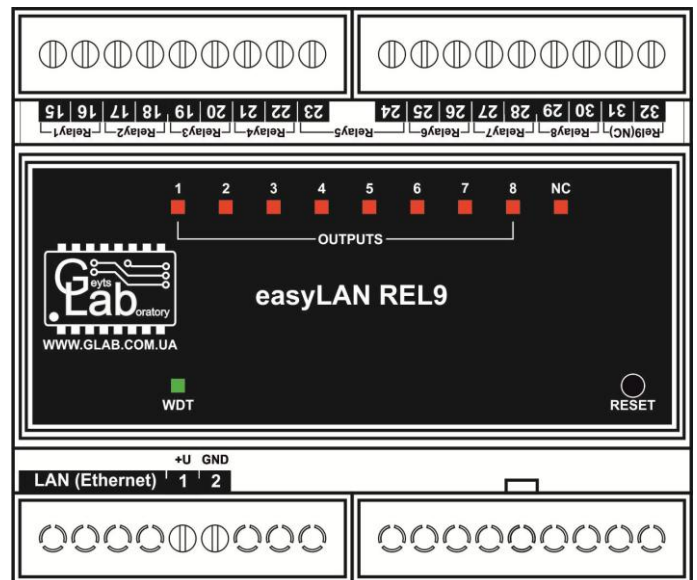
- Indicator off – no power supply.
- The indicator blinks 1 times per second – available power and connection to the paired device (easyLAN INP8 module) is established.
- The indicator blinks 2.5 times per second – available power, no connection to the paired device (easyLAN INP8 module).
- The indicator is always on - an ongoing attempt to initialize the device without an Ethernet connection, or the device is in the Web interface mode.

The "NC" (red) indicator shows the connection to the digital input module easyLAN INP8 availability:

- Indicator off – connected, RELAY9 - off.
- Indicator on – no connection to easyLAN INP8 module, RELAY9 is on (after the programmed timeout).

Indicators of output activity "OUTPUTS 1..8" (red) represent the current status of each channel:

- Indicator on – output is active
- Indicator off – output is inactive



The RESET button is used to reboot the device, factory settings reset and to enter the Web interface mode:

- To reboot the device, you need to briefly press the button.
- To reset the module to the factory settings, hold the button for at least 15 seconds when the device is booted (the "WDT" indicator should stop blinking).
- To enter the Web interface mode, hold the button for at least 5 seconds when the device is booted (the "WDT" indicator should start blinking).

Table 1. Connectors on the lower board.

| Marking | Name | Purpose |
|----------------------------------|----------|----------------------------------|
| Ethernet connector (RJ45) | | |
| LAN | Ethernet | Ethernet network connector |
| PCB power supply terminal blocks | | |
| 1 | U+ | Power supply (from +10V to +24V) |
| 2 | GND | Ground |
| Output terminal blocks | | |
| 15 16 | Relay 1 | Relay №1 contacts |
| 17 18 | Relay 2 | Relay №2 contacts |

| Marking | Name | Purpose |
|----------|---------|-------------------|
| 19 20 | Relay 3 | Relay №3 contacts |
| 21 22 | Relay 4 | Relay №4 contacts |
| 23 24 | Relay 5 | Relay №5 contacts |
| 25 26 | Relay 6 | Relay №6 contacts |
| 27 28 | Relay 7 | Relay №7 contacts |
| 29 30 | Relay 8 | Relay №8 contacts |
| 31 32 | Relay 9 | Relay №9 contacts |

Device configuration

The device is configured via the Web interface, considering the specific LAN configuration. Initially, the device's IP address is 192.168.1.236. To open the module configuration page, enter the Web interface mode. After completing the necessary setting forms, click the "Write" button. To exit the Web interface mode, press the RESET button on the device.

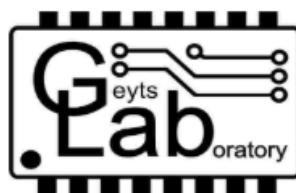
IMPORTANT NOTE: An IP address assigned to the device is forbidden to use at other devices in the local network.

Setup example:

If the gateway of your LAN is 192.168.2.1, then you can set the following settings:

IP Address: 192.168.002.101
 Subnet mask: 255.255.255.000
 Port: any (but the same as on a paired device)
 Time lost connection: depending on preferences
 Identifier: the same as on a paired device
 MAC Address: The MAC address is unique so there is no need to change it.

If the programming is successful, the message "Programming successful" will appear after pressing the "Write" button.



LANRelay9 Program version 1.0

IP Address: . . .

Subnet mask: . . .

Gateway: . . .

Port:

Time lost connection

Identifier

MAC Address: