easyLAN INP8 – 8-Channel Digital Input Module

Description

Digital input module easyLAN INP8 is designed to receive and process the signal from digital inputs. It has 8 independent channels of digital inputs, that can operate in normally open mode or in a normally closed mode. The digital input signals are transmitted over the Ethernet network via TCP/IP to the easyLAN REL9 relay output module.

Specifications

Description	Value
Number of independent digital inputs	8
Reaction time	0,1…9,9 sec (programmable)
Physical control interface	Ethernet (10/100 Mbit/sec)
Type of digital input	TTL, reference voltage +3,3 V, short circuit current ~1 mA
Power supply	+10…+24 V
Current consumption	130 mA
Operating temperature	-20…+45 °C
Operating relative humidity	5…80%
Dimensions, mm	106,25×95,2×57,5
Weight	170 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 input 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 REL9 module) is established.
- The indicator blinks 2.5 times per second – available power, no connection to the paired device (easyLAN REL9 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.

Indicators of input activity "INPUTS 1..8" (yellow) represent the current status of each channel:

- Indicator on – input is active (connected to GND, or logical "0")
- Indicator off – input is inactive (open or logical "1")

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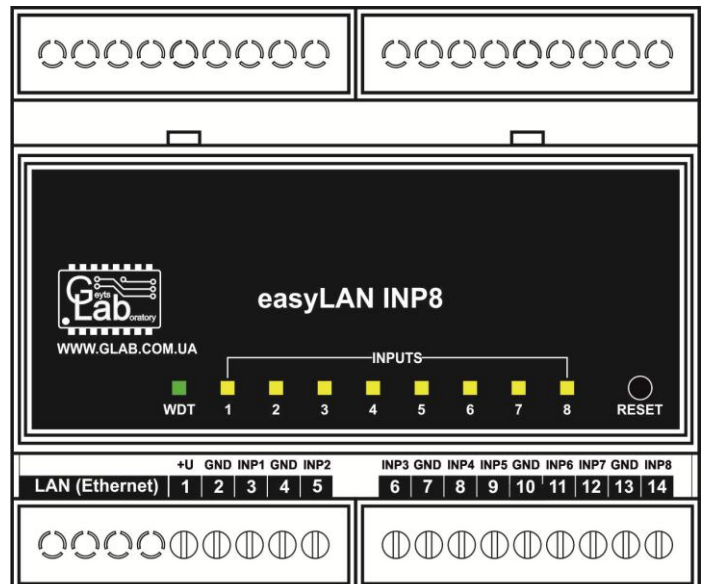
- To reset the module to the factory settings, hold the button for at least 15 seconds when the device is booted (the "WDT" indicator should stop blinking).
- To enter the Web interface mode, hold the button for at least 5 seconds when the device is booted (the "WDT" indicator should start blinking).

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
Input terminal blocks		
3	INP 1	Input №1 contact

Marking	Name	Purpose
5	INP 2	Input №2 contact
6	INP 3	Input №3 contact
8	INP 4	Input №4 contact
9	INP 5	Input №5 contact
11	INP 6	Input №6 contact
12	INP 7	Input №7 contact
14	INP 8	Input №8 contact
4, 7, 10, 13	GND	Ground

Device configuration

The device is configured via the Web interface, considering the specific LAN configuration. Initially, the device's IP address is 192.168.1.235. 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.
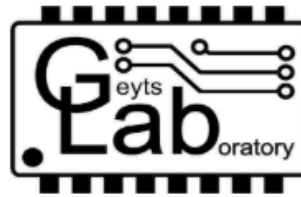
IMPORTANT NOTE: An IP address assigned to the device is forbidden to use at other devices in the local network.

Setup example:

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

IP Address:	192.168.002.100
Server IP Address:	192.168.002.101
Subnet mask:	255.255.255.000
Gateway:	192.168.002.001
Port:	any (but the same as on a paired device)
Input reaction time:	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.

LANInput8
Program version 1.0

IP Address:	192	168	002	100
Server IP Address:	192	168	002	101
Subnet mask:	255	255	255	000
Gateway:	192	168	002	001
Port:	09999			
Input reaction time	01			
Identifier	01			
MAC Address:	00 . 00 . 00 . 55	66	94	

Write