

# User manual I/O Module INO-288-D-01

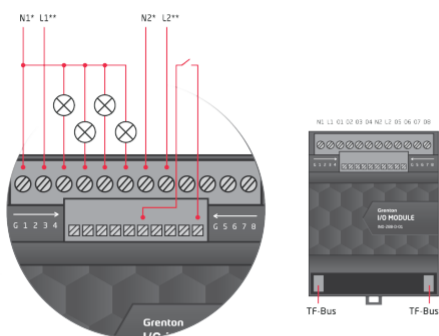
Grenton I/O Module allows you to control up to 8 outputs (max.360VA) and 8 digital inputs.



## 1. Technical data

Device power supply	24 V <sub>dc</sub>
Maximum power consumption	1,8 W (200 mW/ch)
Maximum device current	75 mA (for 24V <sub>dc</sub> )
Rated load voltage	230 V <sub>ac</sub> or 24 V <sub>dc</sub>
Rated circuit load (4 channels) AC1:	6 A / 230 V <sub>ac</sub>
Rated load current per channel:	
AC1	1,5 A / 230 V <sub>ac</sub>
AC15	0,4 A / 230 V <sub>ac</sub>
DC1	1,5 A / 24 V <sub>dc</sub>
DC13	0,22 A / 24 V <sub>dc</sub>
Maximum breaking capacity AC1	360 VA
Relay type	NO, inrush
Maximum wire cross section for outputs	2,5mm <sup>2</sup>
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Weight	170 g
Size [DIN]	4
Fixing	electrical box, rail DIN-3 / TH 35 / TS 35
Dimensions (H/W/D)	58/71/90 mm
Operating temperature range	0 to +45 °C

## 2. Wiring diagram



G	ground signal for digital inputs
1-4	digital inputs 1-4
G	ground signal for digital inputs
5-8	digital inputs 5-8
N1*	'Neutral' signal for first circuit
L1**	'Line' signal for first circuit
O1	first channel in circuit 1
O2	second channel in circuit 1
O3	third channel in circuit 1
O4	fourth channel in circuit 1
N2*	'Neutral' signal for second circuit
L2**	'Line' signal for second circuit
O5	fifth channel in circuit 2
O6	sixth channel in circuit 2
O7	seventh channel in circuit 2
O8	eighth channel in circuit 2

Relay outputs:

- Outputs are divided into two independent circuits. Each circuit has own 'N', 'L' and 4 outputs (channels).
- 'N' 'i' 'L' signals are necessary for 230 V<sub>ac</sub> loads for switch condition optimization.
- For loads up to 24 V<sub>dc</sub> switching signal has to be connected to 'L'. 'N' is not necessary in this

case.

- 'L' signal supply 4 channels in each circuit.
- For capacitive loads it is recommended to use one receiver for one output.
- For capacitive loads it is recommended to set a minimum 1500ms time interval between successive switches of the same output.

## 3. Warnings and cautionary statements



**ATTENTION !**

- Before proceeding with the assembly, read the installation schematics and full instructions available at [www.grenton.com](http://www.grenton.com). Failure to follow the guidelines contained in the instructions and other requirements of due care valid as a result of the nature of the equipment (device) may be dangerous to life / health, damage the device or installation to which it is connected, damage other property or violate other applicable regulations. The manufacturer of the device, Grenton Sp. z o. o. does not bear any responsibility

for the damage (property and non-property related) resulting from the assembly and / or use of the equipment not in accordance with the instructions and / or due diligence in handling the equipment (device).

- Device power supply, permissible load or other characteristic parameters have to be in accordance with the device specification, described in particular in the "Technical data" section.
- The product is not intended for children and animals.
- If you have technical questions or comments about the device operation, contact Grenton Technical Support.
- Answers to frequently asked questions can be found at: [www.support.grenton.pl](http://www.support.grenton.pl)



**DANGER !**

- Danger to life caused by electric current!
- The components of the installation (individual devices) are designed to work in a home

electrical installation or directly in its vicinity. Incorrect connection or use may cause a fire or electric shock.

- All work related to the installation of the device, in particular works involving interference in the electrical installation, may be performed only by a person with appropriate qualifications or licences.
- When installing the device, make sure that the power supply voltage is disconnected from the circuit in which the device is connected or near which the assembly takes place.

## 4. CE marking

The manufacturer declares that the device is in full compliance with the requirements of EU legislation that includes the directives of a new approach appropriate for this equipment. In particular, Grenton Sp. z o. o. declares that the device fulfills the requirements on safety, specified by law, and that it conforms to the na-

tional regulations that implement the appropriate directives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE), the Low Voltage Directive (LVD 2014/35/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).



## 5. Warranty

Warranty available at: [www.grenton.com/warranty](http://www.grenton.com/warranty)

## 6. Manufacturer contact details

Grenton Sp. z o.o.

ul. Na Wierzchowinach 3

30-222 Kraków, Polska (PL)

[www.grenton.com](http://www.grenton.com)