



Regul R400 HMI/CPU



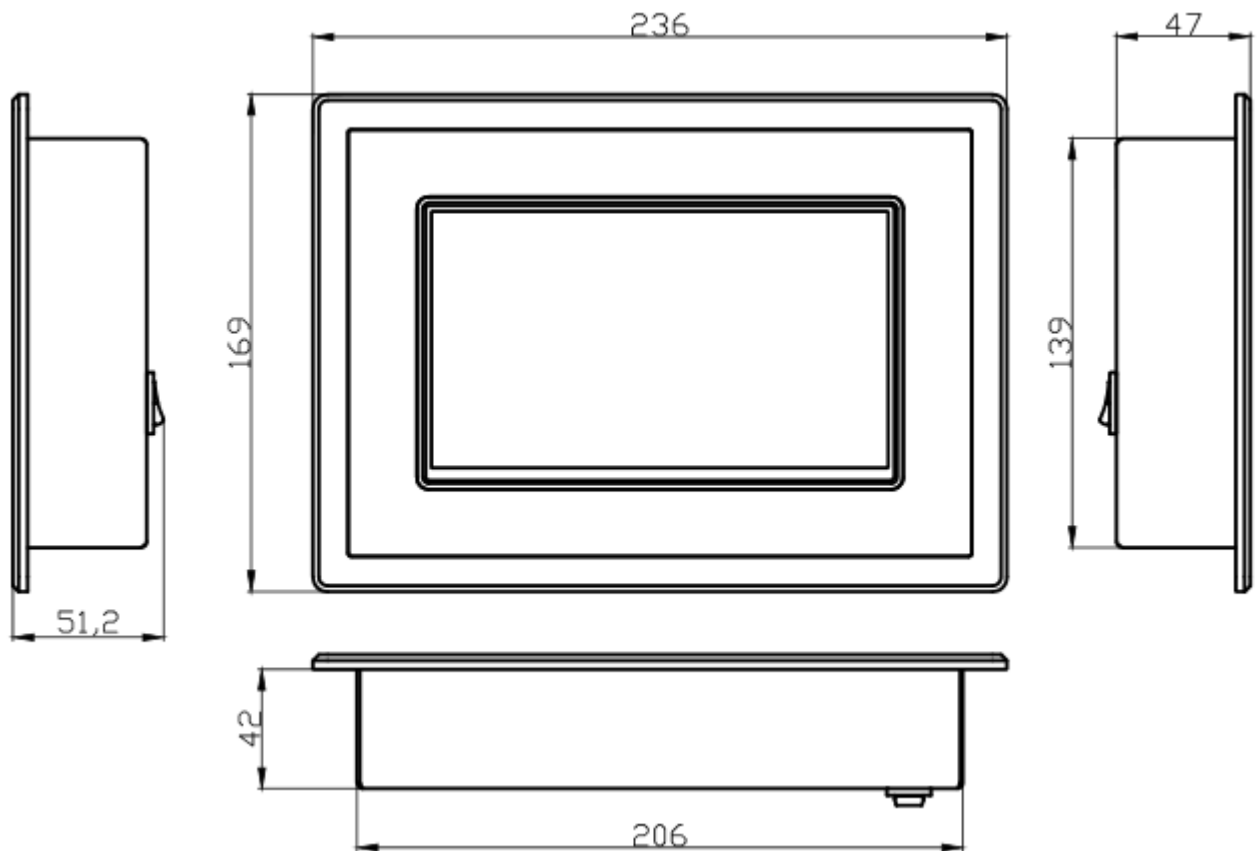
The REGUL R400 human machine interface / programmable logic controller (HMI/PLC) is made in the form of an operator panel.

The controller consists of the following main parts:

- Housing
- Built-in power supply 24 V
- CPU
- Screen
- Capacitive touchpad
- Thin-film keyboard



Dimensions and Housing



The metal body of the controller consists of two parts: the front panel and the housing.

The front panel is the carrier element of the controller, which is attached to the screen with a touch panel.

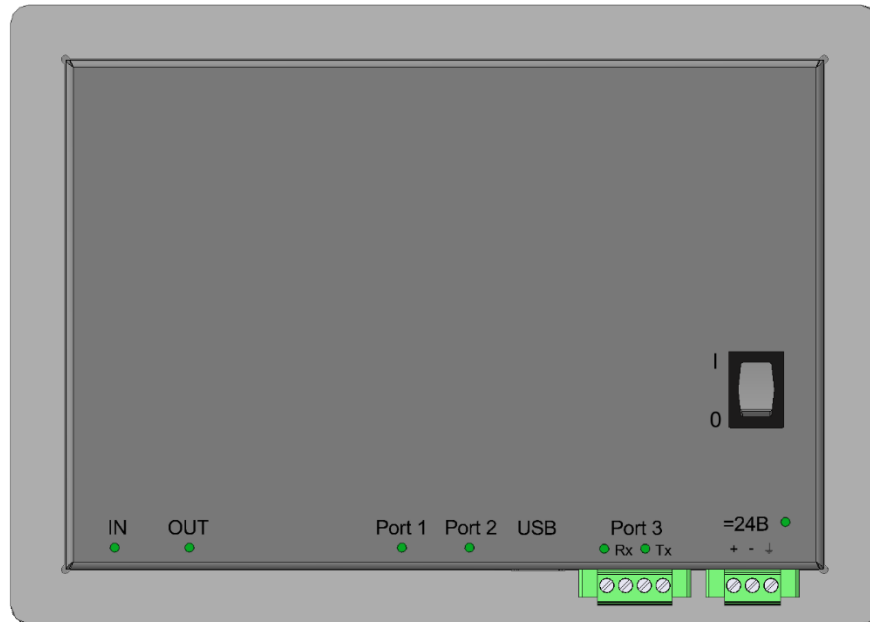
On the front panel there is a membrane keyboard consisting of a numeric keypad, directional arrows and the *Cancel* and *Enter* keys. In addition, in the upper left corner of the panel there is a two-color LED that lights with green during normal operation of the controller and with red if there is any hardware or software error.

The controller's housing protects the internal elements of the device. At the bottom of the housing there is an interface panel to which all connectors for connecting external signals of the controller are connected.

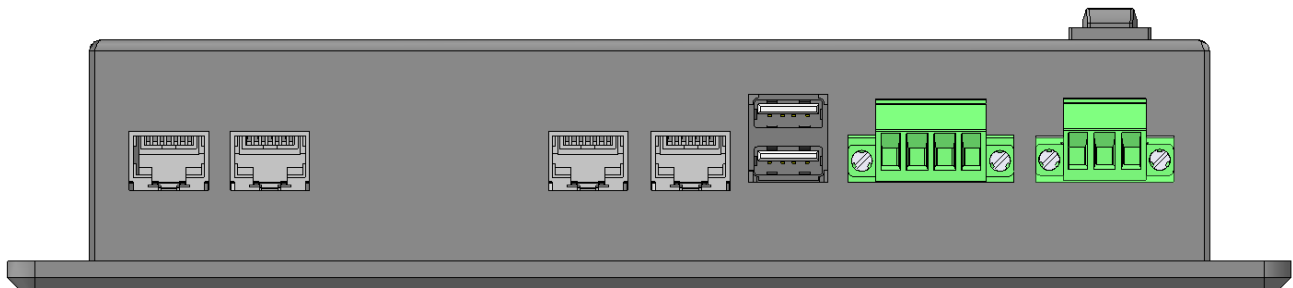


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On the rear panel of the casing there are the power button of the controller and the indicators of data exchange between the central processor and the modules.



View from behind of the REGUL R400 controller



View from the bottom of the REGUL R400 controller



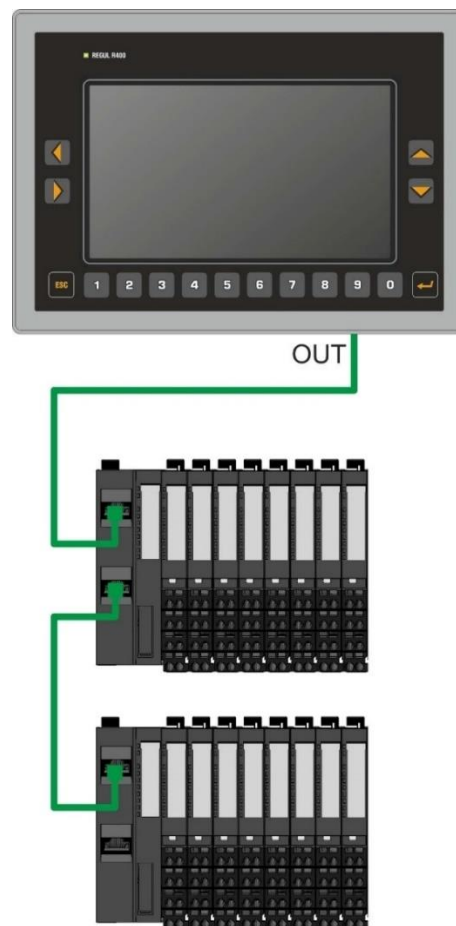
Connecting I/O modules to the R400 controller

REGUL R200, R500 and R600 controllers can be connected to the R400 controller. To do this, two internal data bus ports (IN and OUT) are used, which are put on the controller's interface panel.

You can connect expansion racks by ring, star or mixed circuit in any configuration.

The “ring” connection provides a redundant communication link. If one of them breaks, the controller will continue to function in full. In the case of connection of crates according to the “ring” scheme, the IN port of the R400 controller must be connected to the OUT port of the last (or only) extension rack.

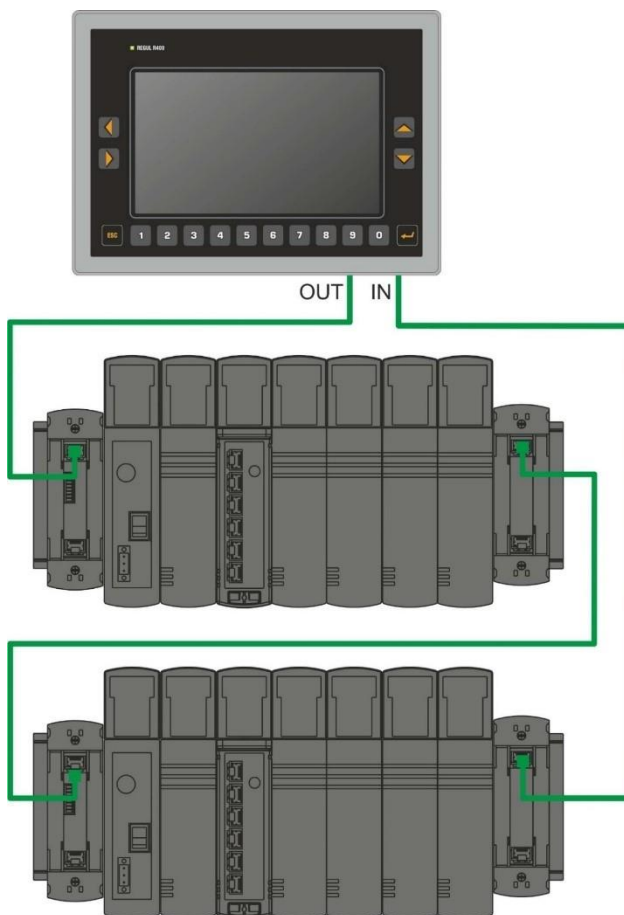
In any case, the controller's output port must be connected to the PORT IN's first extension rack.



Connection of racks in the star scheme



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Connection of racks in ring scheme



Specifications

Parameter, unit of measurement	Value
Screen size, inches	7
Screen resolution, px	800x480
Touch screen type	Capacitive
Random-Access Memory (RAM), GB	2
Read-only memory (ROM), GB	4
Interfaces	
RS-485	1
USB host	2
Ethernet	2
Support for extending racks connection	"Star" and "ring" schemes
DC input voltage, V	
Rating	24
Accepted voltage range	18 to 36
Maximum input current, A	0.9 (at 24 V)
Overvoltage protection	Yes
Reverse polarity protection	Yes
Operating temperature, °C	-20 to +60
Storage temperature, °C	-30 to +70
Dimensions WxDxH, mm	236x169x51.2
Weight, kg	2.4



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Ordering Data

Part-number	Description
R400 CU 00 071	CPU module Intel Atom, 2 GB RAM, 1 x 4GB SSD, RS-485 2 x Ethernet RJ45, 2 x USB-host, 2 x Regul bus
R400 CU 00 071 (W)	CPU module Intel Atom, 2 GB RAM, 1 x 4GB SSD, RS-485 2 x Ethernet RJ45, 2 x USB-host, 2 x Regul bus With integrated web server for visualization