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## BARIX R6

Modbus remote I/O module with serial RS-485 Modbus/RTU interface, and 6 high current relays (230VAC,16A), UL listed, DIN Rail mountable



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Barix R6 is a DIN-rail mountable relay module for commercial control, power switching and home automation applications.

Using the industry standard Modbus protocol over 2-wire RS-485 the device can be controlled from any Modbus capable master.

Each relay has three connections (common, normally closed and normally open) available at screw terminal blocks supporting wires from AWG 26 / 0.15 mm<sup>2</sup> up to AWG 14 / 2.5 mm<sup>2</sup>.

To connect to other Barix devices the Barix R6 features two extension connectors on both sides of the device carrying power and RS-485 signals (one extension cable included).

Barix R6 supports Modbus/RTU protocol at speeds of 9'600 and 19'200 Bauds, with and without parity. Special commands have been added to the

Barionet R6 to support also non Modbus native control systems. Up to 31 Barix extension units can be directly connected to a Modbus Master such as the Barix Barionet and can be increased to up to 250 devices using standard RS-485 repeaters. Using the Barix Barionet, the Barix R6 can be controlled by a local Basic application (BCL) as well as remotely using TCP, UDP, Modbus/TCP and SNMP.

Barix R6 is a low cost alternative to add high power switching capabilities to Modbus systems.

A mounting bracket is available as an accessory.

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### Applications Barix R6

- Switching power (lights, blinds, heating, power relays, motors)
- Activate bells, door strikes, indicators and alarms

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### Software Barix R6 available

- 6 relays (250 VAC 10 A, NO & NC)
  - RS-485 serial interface
  - Protocol: Modbus/RTU
  - Two extension connectors for easy daisy chaining of power supply, additional relay units (R6), I/O units (IO12) etc.
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# Technical Specifications

## Relays

- 6 relays (250 VAC 10 A, 16 Amax <1sec) on screw block with common, NO (normally open) and NC (normally closed) contacts
- for wires AWG 26 – AWG 14 / 0.15 – 2.5 mm<sup>2</sup>

## RS-485 / Power / Expansion

- Power/RS-485 on detachable screw block for wires AWG 28 – AWG 16 / 0.08 – 1.3 mm<sup>2</sup>
- 2 extension connectors (3<sup>1</sup>/75 mm cable incl.)

## RS-485 / Protocol

- RS-485 (2-wire), 9'600/19'200 Baud, 8 bit, Even/No parity software configurable,
- Modbus/RTU protocol

## Misc

- 1 LED for power indication
- 1 LED for RS-485 active send indication
- 6 LED for relay status indication
- Internal connector for default settings jumper

## Power supply requirements

- 12 to 24 VAC / 9 to 30 VDC
- 3.5 Watt max. (all relays active)

## Case

- high quality plastic, 220 grams, DIN-rail mount.
- 4.13" x 3.34" x 2.83"/105 mm x 85 mm x 32 mm

## MTBF

- Min. 237 000h acc. to MIL217F at 25°C ambient temperature

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## Environmental

### Operating Environment

0 to +40°C / 32 to 104°F

### Storage Conditions

0 to +70°C / 32 to 158°F,  
both 0 - 70% relative humidity, non-condensing

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## Certifications

FCC (A and B), CE ( A and B)

### Immunity

EN60730-1:2000

### Emissions

EN60730-1:2000 (Class B)

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## Ordering Information

2004.9041 Barix R6

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For commercial related questions (distributors contacts, price list, business opportunities) please contact **sales@barix.com**

For technical inquiries (problem reports, request for documentation, etc) please contact **support@barix.com**

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**Barix AG** – Seefeldstrasse 303 – CH-8008 Zurich – info@barix.com – www.barix.com  
Phone: +41 43 43322 11 – Fax: +41 44 2742849



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