
BARIX X8

Modbus remote I/O module with RS485 Modbus/RTU interface, 8 universal (analog or digital) TTL level inputs or outputs.



Barix X8 is I/O to RS-485 Modbus converter for commercial interfacing, control 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.

The eight I/O ports support TTL level (5 VDC) with limited current range for outputs (supply voltage depending, 24 to 85 mA total). For applications with industrial voltage level (10 to 30 VDC) and higher currents (max. 6 A total) select the Barix Barionet IO12 instead.

Over the RS-485 interface each I/O port can be configured as either an input or an output. Outputs can be preset with a power-on value. I/O ports can be configured to support up to 16 1-wire temperature sensors, one humidity sensor and an access reader supporting the WIEGAND interface (data, tampering alarm, buzzer and LED).

Applications Barix X8

- General I/O to RS-485 converter (inputs and outputs)
- WIEGAND reader to RS-485 converter (inputs and outputs)
- Up to eight push buttons (inputs) or LED's for status display
- Local temperature and humidity reading (inputs)

Barix X8 supports Modbus/RTU protocol speeds of 9'600 and 19'200 Bauds, with and without parity. A 4-wire cable (2 bus, 2 power) can be used to connect other Modbus devices in a bus or a star configuration. Up to 31 Barix X8 converters can be directly connected to a Modbus master such as the Barix Barionet and can be increased to up to 250 converters using standard RS-485 repeaters.

Using the Barix Barionet, the Barix X8 can be controlled by a local Basic application (BCL) as well as remotely using TCP, UDP, Modbus/TCP and SNMP.

Two mounting brackets with 5 mm holes allow mounting on surfaces but can be removed (predetermined braking line) if not used

Software Barix X8 available

- 8 configurable inputs/outputs (TTL-level)
 - Presetable power-on value for outputs
 - RS-485 serial interface
 - Protocol: Modbus/RTU
 - Connects to LED displays, buttons, temperature and humidity sensors
 - Converts WIEGAND reader interface to RS-485 serial interface
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Technical Specifications

Connectors

- Power/RS-485, I/O (I/O, 5Vout,GND) and service interface on spring contact connector blocks for wires AWG 28 – AWG 16 / 0.08 – 1.3 mm²

Inputs / Outputs

- 8 I/O's (usage and power-on preset configurable over RS-485) on spring contact connector block for wires AWG 28 – AWG 16 / 0.08 – 1.3 mm²
- Inputs with internal 10 kOhm pull-up
- Max total 5 Vout & outputs current @ (V supply): 24 mA (30 VDC), 32 mA (24 VDC), 85 mA (12 VDC)

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
- 2 LED for internal status indication
- External connector for default settings jumper

Power supply requirements

- 12 to 24 VAC / 9 to 30 VDC, 1 Watt max.

Case

- high quality plastic, 33 g, Ø 2" (2.75" mounting)
h 0.9"/ Ø 51 mm (70 mm mounting) h 23 mm

MTBF

- Min. 590 000h acc. to MIL217F at 25°C ambient temperature

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

Certifications

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

Immunity

EN60730-1:2000

Emissions

EN60730-1:2000 (Class B)

Ordering Information

2004.9044 Barix X8

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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