

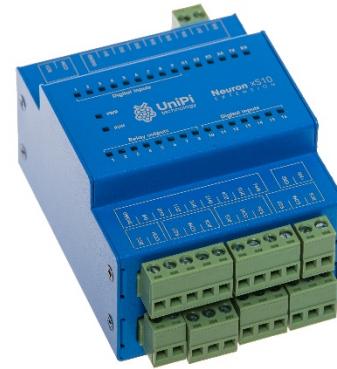
# Neuron Extension xS10



Series	Digital inputs	Digital outputs	Relay outputs	Analog inputs	Analog outputs	Communication
xS10	16		8			RS485 Modbus RTU

## Basic properties

- Power supply 24 V DC
- IO extension module with Modbus RTU communication protocol
- RS485 galvanically isolated serial interface
- Watchdog for monitoring running of the control system
- Direct Switch function
  - Rapid input response within the group – tens of  $\mu$ s
  - Available features: identity, negation, toggle
- Save and restore settings and fail-safe state of outputs to NVRAM and reload at startup
- Compact size and easy installation on DIN rail



### Communication

<b>Serial channels</b>	1x RS485
<b>Transmission speed RS485</b>	9.6 .. 115 kbps
<b>Galvanic isolation RS485</b>	Yes

### Digital inputs

<b>Number of inputs × groups</b>	8 × 2
<b>Common connector</b>	DIGND
<b>Galvanic isolation</b>	Yes
<b>Functions of inputs</b>	Signalization, counter, Direct Switch
<b>Operation range</b>	5 – 24 V DC
<b>Input voltage of log. 0</b>	Max. 3,5 V DC
<b>Input voltage of log. 1</b>	Min. 5 V DC
<b>Input resistance of log. 1</b>	6 200Ω
<b>Delay 0→1/1→0</b>	20 µs / 60 µs

### Relay outputs

<b>Number of outputs × groups</b>	2 × 3, 1 × 2
<b>Galvanic isolation</b>	Yes
<b>Type of contact</b>	Closing contact
<b>Switchable voltage</b>	250 V AC/30 V DC
<b>Switchable current</b>	5A
<b>Short time overvoltage</b>	5A
<b>Current via common conn.</b>	10A
<b>Time to switch on/off</b>	10ms
<b>Mechanical lifetime</b>	5 000 000
<b>Electrical lifetime</b>	100 000
<b>Protection against shortage</b>	No
<b>Inductive load protection</b>	External
<b>Isolation voltage</b>	4 000 V AC

### Dimensions and weight

<b>Dimensions</b>	72 × 90 × 59 mm
<b>Weight</b>	310 g

### Power supply

<b>Rated voltage - SELV</b>	24 V DC
<b>Voltage tolerance</b>	-15% .. +25%
	20,4 .. 30 V DC
<b>Power consumption</b>	Max. 2,2 W
<b>Reverse polarity protection</b>	Yes
<b>Oversupply protection</b>	No

### Installation and operating conditions

<b>Operating temperature</b>	0 °C .. + 55 °C
<b>Storing temperature</b>	-25 °C .. +70 °C
<b>Dielectrical strength</b>	In accordance with EN 60950
<b>Degree of protection IP (IEC 529)</b>	IP20
<b>Operation position</b>	Horizontal
<b>Installation</b>	On 35mm DIN rail into distribution box
<b>Connection</b>	Pluggable terminal blocks
<b>Wire gauge</b>	Max. 2,5 mm <sup>2</sup>

### Standards compliance

<b>ČSN EN 6095-1 ed. 2</b>
<b>ČSN EN 61000-6-3 ed. 2</b>
<b>ČSN EN 55014-1 ed. 3</b>
<b>ČSN EN 55022 ed. 3</b>
<b>2006/95/EC</b>
<b>2004/108/ES</b>
<b>2014/35/EU</b>
<b>2014/30/EC</b>