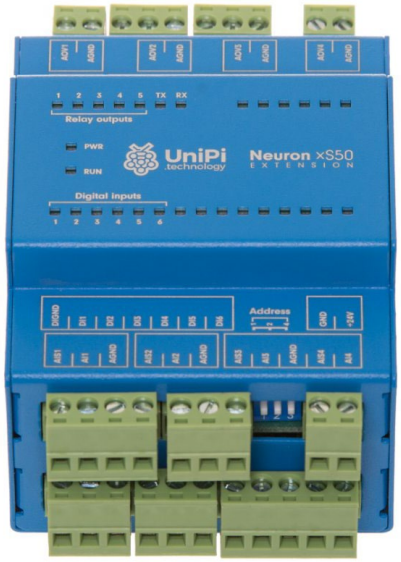
unipi technology

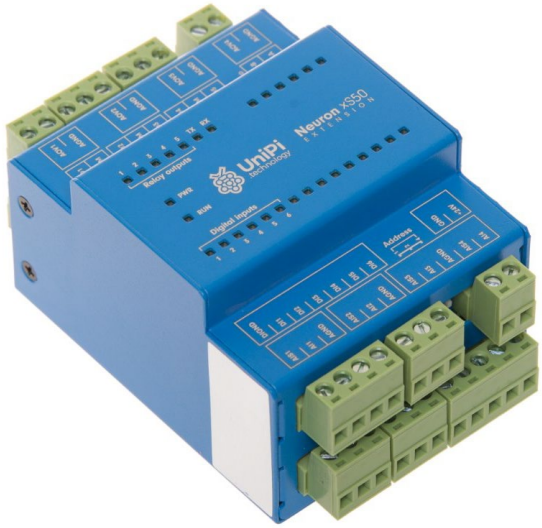
Product datasheet
Product code: 2016044-1

Unipi Extension xS50

PRODUCT DESCRIPTION

Unipi Extension xS50 is an extension module communicating via the RS485 serial interface (Modbus RTU). The module is a simple and inexpensive method of extending your project by additional inputs & outputs. The xS50 features a set of analog I/Os combined with a set of digital and relay I/Os. That makes it applicable for more extensive projects including measurements and control of analog components.



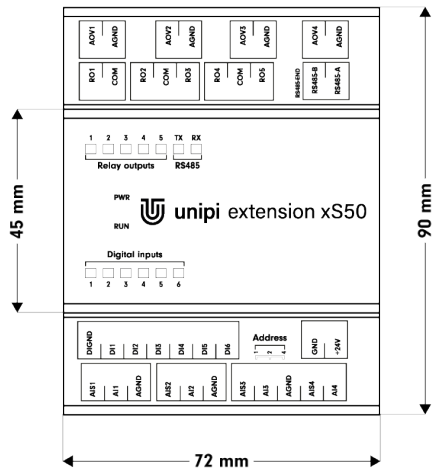


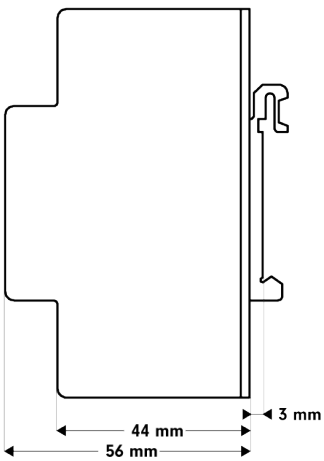
INPUTS & OUTPUTS

1 × RS485 Modbus RTU with galv. isolation
6 × digital input (incl. pulse counter)
5 × relay output
4 × analog input
4 × analog output

OTHER FEATURES

- Special functions
  - Direct Switch – automatic response to input value change
  - MasterWatchdog – switches outputs to a safe mode if communication with the PLC is interrupted
  - Configurable user LEDs.
- Durable aluminium chassis (IP20)
- Available in OEM variant.





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Unipi Extension xS50

- **Communication**

Serial/bus channels	1 × RS485
RS485 transmission speed	134 baud .. 115 200 baud
RS485 galvanic isolation	Yes
RS485 pull-up/pull-down resistors	No
RS485 terminating resistor	Attachable, 120 Ω

- **Digital inputs**

Nr.of inputs × groups	6 × 1
Common connector	DIGND
Galvanic isolation	Yes
Functions of inputs	Counter (incl. memory), signalization, Direct Switch
Max. frequency of counter input signal	10 kHz
Input voltage of log. 0	Max. 3 V DC
Input voltage of log. 1	Min. 7 V DC
Max. input voltage	35 V DC
Input resistance	6 200 Ω
Delay 0–>1/1–>0	20 µs / 60 µs

- **Relay outputs**

Nr.of outputs × groups	1 × 1, 2 × 2
Galvanic isolation	Yes
Type of contact	Normally open (SPST)
Switchable voltage	250 V AC / 30 V DC
Switchable current	5 A
Short time overvoltage	5 A
Current via common conn.	10 A
Time to switch on/off	10 ms
Mechanical lifetime	5 000 000 cycles
Electrical lifetime	100 000 cycles
Protection against shortage	No
Inductive load protection	Not included
Isolation voltage	4 000 V AC
Isolation voltage	4 000 V AC

- **Analog inputs**

Nr.of inputs × groups	4 × 1
Common connector	AGND
Available functions	0–10 V / 0–2,5 V 0–20 mA 0–1960 Ω 0–100 kΩ
Galvanic isolation	Yes
Resolution	16 bits – U, I 24 bits – R
Conversion speed	60 µs – U, I 400 ms – R
Input resistance	44 kΩ – U 100 Ω – I
Resistance measurement method	2/3wire

- **Analog outputs**

Nr.of outputs × groups	4 × 1
Common connector	AGND
Available functions	0–10 V
Galvanic isolation	Yes
Max. voltage/current	10 V / 25 mA
Resolution	12 bits
Conversion speed	300 µs
Resistance measurement method	–

- **Power supply**

Rated voltage - SELV	24 V DC
Power consumption	Typ. 3 W Max. 12 W
Reverse polarity protection	Yes

- **Installation and operating conditions**

Degree of protection IP (IEC 529)	IP 20
Operation position	Horizontal
Installation	On 35mm DIN rail into distribution box (holder included)
Connection	Pluggable terminal blocks
Wire gauge	Max. 2.5 mm^2

- **Dimensions and weight**

Dimensions	72 × 90 × 56 mm
Weight	320 g

- **Standards compliance**

EN 60730-1 ed.3:2012
RoHS
WEEE