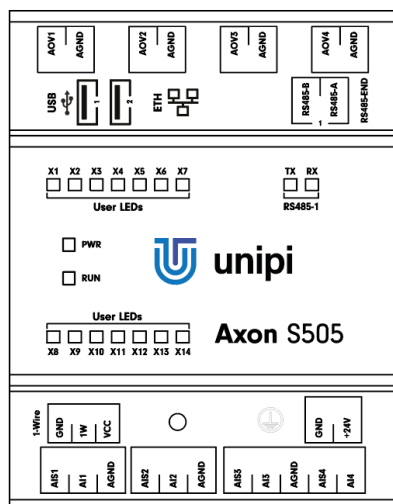


# Unipi Axon S505

## PRODUCT DESCRIPTION

Unipi Axon S505 is a programmable logic controller (PLC) and gateway designed for automation, control, regulation and monitoring. As an entry model of the Axon 500 line, the S505 features a set of analog inputs/outputs while retaining its compact size. That makes it applicable in small projects including reading data from analog sensors and/or controlling various analog components. The S505 also features a single RS485 serial interface for connection of extension modules or gateways and a 1-Wire interface for connection of digital temperature or humidity sensors.



## COMPUTING MODULE

Allwinner H5 1.2 GHz quad-core CPU, 1GB RAM, 8GB eMMC onboard memory

## FEATURES

Inputs/outputs

- 4 × analog input
- 4 × analog output

Software

- Powered by OS Linux
- Mervis – IDE (IEC 61131-3), HMI editor, proxy server, cloud database, SCADA, wide range of supported protocols
- Open-source solutions – Node-RED, openHAB, Homebridge, FHEM, PiDome, DomotiGa, Domoticz, Pimatic and many more
- Custom SW implementation– EVOK open API, Modbus TCP interface, SysFS

## FUNCTIONALITY

Automation, IoT and IIoT, remote online monitoring and regulation, HVAC control, SCADA, sensorics, smart home control (lighting, doors, locks, irrigation etc.)

Communication interfaces

- 1 × RS485
- 1 × 1-Wire bus
- 1 × 1Gbit Ethernet
- 2 × USB 2.0

Other features

- Built-in webserver
- Special functions – Direct Switch, MasterWatchdog, user LEDs
- Durable aluminium chassis (IP20)
- Extended operating temperature range
- Available in an OEM variant
- Custom development available (IQRf, LoRa, wM-Bus, ZigBee, EnOcean and more)

# Unipi Axon S505

- Communication

Ethernet	1 × 1Gbit Ethernet
Serial/bus channels	1 × RS485, 1 × 1-Wire
RS485 transmission speed	134 baud .. 115 200 baud
RS485 galvanic isolation	Yes
RS485 biasing resistors	Yes, 560 Ω
RS485 terminating resistor	Built-in attachable, 120 Ω
1-Wire galvanic isolation	Yes
1-Wire output voltage Vcc	5 V
1-Wire max. current Vcc	50 mA
1-Wire connector	3 × pole, max. 1.5 mm <sup>2</sup>
WiFi	IEEE 802.11 b/g/n
Bluetooth	4.0, Low Energy (BLE)
WiFi/Bluetooth antenna	Internal
USB	2 × USB 2.0

- 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. 5 W Max. 14 W
Reverse polarity protection	Yes

- Installation and operating conditions

Operating conditions	0 °C .. + 70 °C, relative humidity 10 % .. 95 %, without aggressive substances, condensing vapor and fog
Storing conditions	- 25 °C .. + 70 °C, relative humidity 10 % .. 95 %, without aggressive substances, condensing vapor and fog
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 <sup>2</sup>

- Dimensions and weight

Dimensions	70 × 90 × 60 mm
Weight	202 g

- Standards compliance

EN 60730-1 ed.3:2012
RoHS
WEEE