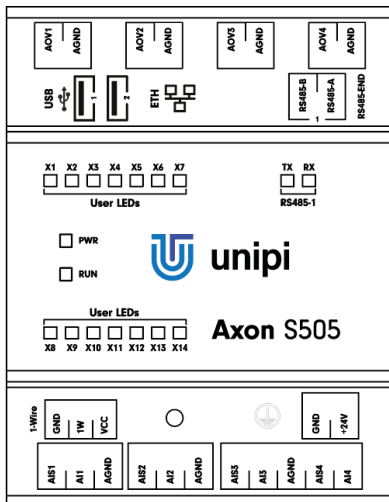


# Unipi Axon S505

## 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 webservice
- 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)

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## • Communication

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

## • Analog inputs

<b>Nr.of inputs × groups</b>	4 × 1
<b>Common connector</b>	AGND
<b>Available functions</b>	0–10 V / 0–2.5 V 0–20 mA 0–1960 Ω 0–100 kΩ
<b>Galvanic isolation</b>	Yes
<b>Resolution</b>	16 bits – U, I 24 bits – R
<b>Conversion speed</b>	60 μs – U, I 400 ms – R
<b>Input resistance</b>	44 kΩ – U 100 Ω – I
<b>Resistance measurement method</b>	2/3wire

## • Analog outputs

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

## • Power supply

<b>Rated voltage - SELV</b>	24 V DC
<b>Power consumption</b>	Typ. 5 W Max. 14 W
<b>Reverse polarity protection</b>	Yes

## • Installation and operating conditions

<b>Operating conditions</b>	0 °C .. + 70 °C, relative humidity 10 % .. 95 %, without aggressive substances, condensing vapor and fog
<b>Storing conditions</b>	- 25 °C .. + 70 °C, relative humidity 10 % .. 95 %, without aggressive substances, condensing vapor and fog
<b>Degree of protection IP (IEC 529)</b>	IP 20
<b>Operation position</b>	Horizontal
<b>Installation</b>	On 35mm DIN rail into distribution box (holder included)
<b>Connection</b>	Pluggable terminal blocks
<b>Wire gauge</b>	Max. 2.5 mm <sup>2</sup>

## • Dimensions and weight

<b>Dimensions</b>	70 × 90 × 60 mm
<b>Weight</b>	202 g

## • Standards compliance

<b>EN 60730-1 ed.3:2012</b>
<b>RoHS</b>
<b>WEEE</b>