UniPi Axon L205

Model	DI	DO	RO	AI	AO	Communication	CPU	RAM	eMMC	Other features
L205	36	4	28	1	1	2× RS485 1x RS232 1× 1-Wire bus 1× 1Gbit Ethernet	4× 1.2 GHz	1 GB	8 GB	WiFi Bluetooth

Basic features

- OS Linux
- Power supply 24 V DC
- Real-time clock (RTC) with backup up to 7 days
- 1Gb Ethernet
- USB for connecting other devices
- RS485 & RS232 serial interfaces for connection
  of extension or communication modules
- Direct Switch function
  - Rapid input response within the group – tens of µs
  - Available features: identity, negation, toggle
- Watchdog function for monitoring of the control system
- Save and restore settings and fail-safe state of outputs to NVRAM and reload at startup
- 1-Wire bus hardware restart function
- Wide array of software platforms
  - PLC platforms for easy control implementation
    - Mervis
    - REX
  - Opensource platforms for easy implementation of customer solutions
    - SysFS
    - Modbus TCP
    - Modern HTTP interface (WebSocket, REST, ...)
- User-configurable LEDs
- Ready for wireless technology implementation – Lora, Zigbee, IQRF,Sigfox, EnOcean, GSM, LTE...
- In-built webserver for user application display
- Compact dimensions, easy installation to a DIN rail

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Communication

Ethernet	1× 1Gbit Ethernet
Serial/bus channels	2× RS485, 1x RS232, 1× 1-Wire
Transmission speed RS485 1.1	134 baud .. 115 kbaud
Transmission speed RS485 1.3	50 baud .. 3 Mbaud
Galvanic isolation RS485	Yes
Transmission speed RS232	50 baud .. 3 Mbaud
Galvanic isolation RS232	No
Galvanic isolation 1-Wire	Yes

Digital inputs

Number of inputs × groups	4 × 9
Common connector	DIGND
Galvanic isolation	Yes
Functions of inputs	Signalization, counter, Direct Switch
Operation range	5 – 30 V DC
Input voltage of log. 0	Max. 3,5 V DC
Input voltage of log. 1	Min. 5 V DC
Input resistance of log. 1	6 200Ω
Delay 0–>1/1–>0	20 µs / 60 µs

Digital outputs

Number of outputs × groups	4 × 1
Common connector	DOGND
Galvanic isolation	No
Type of output	Transistor
Aditional functions	PWM
Switchable voltage	5 – 50 V DC
Switchable current continual/pulse	750 mA / 1 A
Max. total current DO1.1 – DO1.4	1A
Time to switch on/off	Typ. 130 ns / 20ns
Switching speed	Max. 200 kHz/8bit

Relay outputs

Number of outputs × groups	2 × 12, 1 × 4
Galvanic isolation	Yes
Type of contact	Closing contact
Switchable voltage	250 V AC/30 V DC
Switchable current	5A
Short time overvoltage	5A
Current via common conn.	10A
Time to switch on/off	10ms
Mechanical lifetime	5 000 000
Electrical lifetime	100 000
Protection against shortage	No
Inductive load protection	External
Isolation voltage	4 000 V AC

Dimensions and weight

Dimensions	210 × 90 × 59 mm
Weight	420 g

Analog inputs

Nr. of inputs × groups	1 × 1
Common connector	AGND
Available functions	0 – 10 V 0 – 20 mA
Galvanic isolation	No
Resolution	12 bits
Conversion speed	10µs

Analog outputs

Nr. of out. × groups	1 × 1
Common connector	AGND
Available functions	AO:0 – 10V / 0 – 20mA AI: 0 – 2 kΩ Ni1000, Pt1000
Galvanic isolation	No
Resolution	12 bits
Conversion speed	1 ms

Power supply

Rated voltage - SELV	24 V DC
Voltage tolerance	–15% .. +25% 20,4 .. 30 V DC
Power consumption	Typ. 10,5 W Max. 19,5 W
Internal protection	Yes

Installation and operating conditions

Operating temperature	0 °C .. + 55 °C
Storing temperature	-25 °C .. +70 °C
Dielectrical strength	According to EN 60950
Degree of protection IP	IP20
Operation position	Horizontal
Installation	On 35mm DIN rail into distribution box
Connection	Pluggable terminal blocks
Wire gauge	Max. 2,5 mm²

Standard compliance

ČSN EN 6060730-1
ČSN EN 6095-1 ed. 2
ČSN EN 61000-6-3 ed. 2
ČSN EN 55014-1 ed. 3
ČSN EN 55022 ed. 3
2006/95/EC, 2004/108/ES, 2014/35/EU, 2014/30/EC