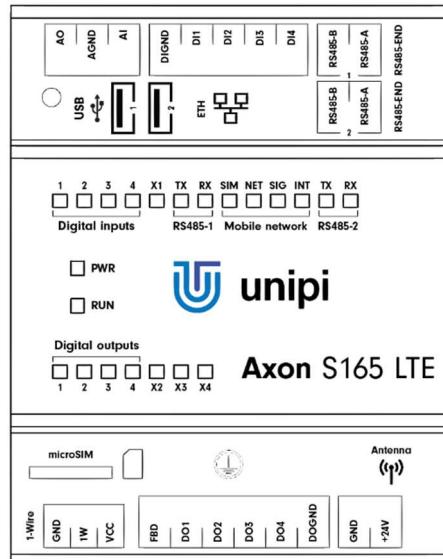


# UniPi Axon S165 LTE

Model	DI	DO	RO	AI	AO	Communication	CPU	RAM	eMMC	Other features
<b>S165 LTE</b>	4	4	-	1	1	2× RS485 1x RS232 1x 1-Wire bus 1× 1Gb 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
- LTE wireless module
- 2x 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  $\mu$ s
  - 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, ...)
- 4x 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



 <b>Communication</b>		 <b>Analog inputs</b>
<b>Ethernet</b>	1× 1Gbit Ethernet	<b>Number of inputs × groups</b> 1 × 1
<b>Serial/bus channels</b>	2× RS485, 1× 1-Wire	<b>Common connector</b> AGND
<b>RS485 1 transmission speed</b>	134 baud .. 115 baud	<b>Available functions</b> 0 – 10 V
<b>RS485 1 transmission speed</b>	50 baud .. 3 Mbaud	0 – 20 mA
<b>RS485 galvanic isolation</b>	Yes	<b>Galvanic isolation</b> No
<b>1-Wire galvanic isolation</b>	Yes	<b>Resolution</b> 12 bits
<b>LTE category</b>	4	<b>Conversion speed</b> 10µs
<b>LTE bands</b>	1, 3, 5, 7, 8, 20	
<b>UMTS category</b>	24/6	
<b>HSDPA/HSUPA</b>		
<b>UMTS band</b>	850/900/1900/2100	
<b>GPRS/EDGE class</b>	12	
<b>SIM card type</b>	microSIM	
 <b>Digital inputs</b>		 <b>Analog outputs</b>
<b>Number of inputs × groups</b>	4 × 1	<b>Number of outputs × groups</b> 1 × 1
<b>Common connector</b>	DIGND	<b>Common connector</b> AGND
<b>Galvanic isolation</b>	Yes	<b>Available functions</b> AO 0 – 10V / 0 – 20mA
<b>Functions of inputs</b>	Signalization, counter, Direct Switch	Resistance measure: 0 – 2 kΩ, Ni1000, Pt1000
<b>Operation range</b>	5 – 24 V DC	<b>Galvanic isolation</b> No
<b>Input voltage of log. 0</b>	Max. 3,5 V DC	<b>Resolution</b> 12 bits
<b>Input voltage of log. 1</b>	Min. 5 V DC	<b>Range/current</b> 10V/20mA
<b>Input resistance of log. 1</b>	6 200Ω	<b>Conversion speed</b> 1ms
<b>Delay 0-&gt;1/1-&gt;0</b>	20 µs / 60 µs	
 <b>Digital outputs</b>		 <b>Power supply</b>
<b>Number of outputs × groups</b>	4 × 1	<b>Rated voltage - SELV</b> 24 V DC
<b>Common connector</b>	DOGND	<b>Voltage tolerance</b> -15% .. +25% 20,4 .. 30 V DC
<b>Galvanic isolation</b>	No	<b>Power consumption</b> Typ. 3W Max. 12W
<b>Type of output</b>	Transistor	<b>Internal protection</b> Yes
<b>Additional functions</b>	PWM	
<b>Switchable voltage</b>	5 – 50 V DC	
<b>Switchable current continual/pulse</b>	750 mA / 1 A	
<b>Max. total current DO1.1-1.4</b>	1A	
<b>Time to switch on/off</b>	Typ. 130 ns / 20ns	
<b>Switching speed</b>	Max. 200 kHz/8bit	
 <b>Dimensions and weight</b>		 <b>Installation and operating conditions</b>
<b>Dimensions</b>	72 × 90 × 59 mm	<b>Operating temperature</b> 0 °C .. + 55 °C
<b>Weight</b>	172 g	<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 mm²
 <b>Standards compliance</b>		
<b>ČSN EN 6060730-1</b>		
<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, 2004/108/ES, 2014/35/EU, 2014/30/EC</b>		

