

Models: UniPi Axon S105, S115, S155, S165, S175, S205/215, S505/515, S605, M205, M265, M505, M515, M565, L205, L505

PLEASE RETAIN THIS INFORMATION FOR FUTURE REFERENCE

WARNINGS

This product shall only be connected to an external power supply rated 24 V DC. Any external power supply used with the UniPi Neuron shall comply with relevant regulations and standards applicable in the country of intended use.

Do not expose it to water or moisture whilst in operation.

All peripherals used with the UniPi Axon should comply with relevant standards for the country of intended use and be marked accordingly to ensure that safety and performance requirements are met.

Operating conditions

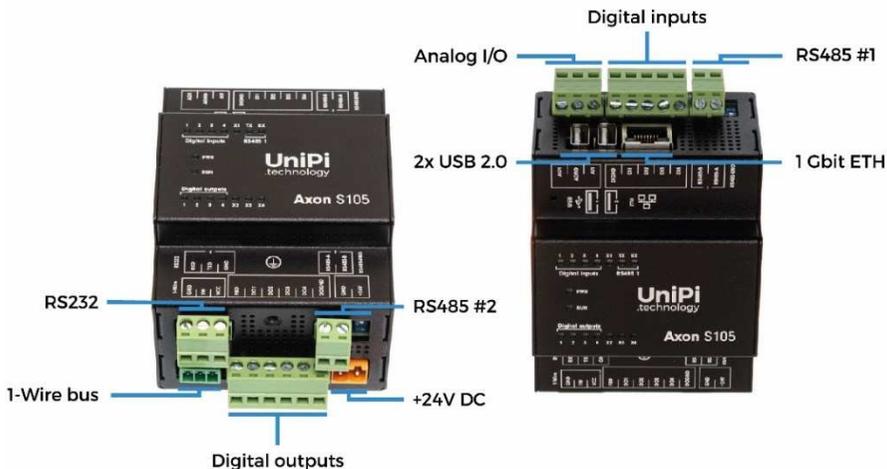
| | |
|-----------------------------------|---------------------|
| Power supply voltage (SELV) | 24 V DC |
| Installation | On DIN rail (35 mm) |
| IP Degree of Protection (IEC 529) | IP20 |

Compliance information

UniPi Axon complies with the relevant provisions of the RoHS Directive for the European Union.

WEEE Directive Statement for the European Union

In common with all Electronic and Electrical products the UniPi Axon should not be disposed of in household waste. Alternative arrangements may apply in other jurisdictions.



General information

<https://www.unipi.technology/>

Technical support, downloads

<https://kb.unipi.technology>

Getting started

Software

Each Axon contains Debian based OS with pre-installed Mervis services and necessary UniPi drivers (SysFS, Modbus TCP). SSH is disabled by default and can be enabled via service web interface (default user: "unipi" password: "unipi.technology"). *Make sure to change the default password if you enable SSH.* To find out more visit <https://kb.unipi.technology>

Powering up

1. Connect Axon to a local network using an Ethernet cable.
2. Connect a power supply according to the Axon manufacturing plate.
3. Axon will automatically try to get IP address from your DHCP server. If it fails, it will set its own random IP address from subnet 169.254.0.0/16 – a default static IP address can be enabled via the service interface.
4. Axon publishes its running services using mDNS/DNS-SD which can be used to discover the IP address using a Bonjour browser.

Service web interface

The service web interface allows configuration of IP address, SSH and Mervis services management (enable/disable the services), clearing Mervis configuration, flashing OS image and other useful things. To enable it, follow these steps:

1. Press and hold the button from the top of the case next to connector labels.
2. Power up the controller.
3. Axon will boot to service mode. This is indicated by alternating flashing of lower and upper rows of LEDs. The button can now be released. All outputs are set to the default (fail-safe) configuration – from factory, all outputs are disabled.
4. Upon startup, you will be able to access the service web interface on port 80 using both Wi-Fi or LAN at the same time.
 - a. **LAN:** Axon will set its own IP address to 192.168.200.200 and will also try to get IP address from DHCP server if available. The web interface will be thus available at both IP addresses.
 - b. **Wi-Fi:** Axon will create a Wi-Fi network (SSID: UNIPICONFIG, password: unipi.technology), using WPA2. The web interface will be then available at <http://192.168.201.1>

Flashing the Operating System

The OS can be re-flashed using the service web interface or a USB flash disk.

Attention: The whole content of the internal storage will be erased.

Flashing the OS using service web interface

1. Download the zipped Axon OS image from <https://kb.unipi.technology> and unzip it to new folder on your PC.
2. Enter the Service mode.
3. Drag and drop the archive.swu file to the Software update dialog on the service web interface.
4. Wait until the operation finishes – the process can be seen in the Messages dialog.
5. The Axon can be rebooted.

Flashing the OS using USB flash disk

Attention: Not all flash disks are compatible. If the procedure does not work, use a different flash disk or the web-based method.

1. Download the zipped Axon OS image from <https://kb.unipi.technology>
2. Prepare at least 2GB USB flash disk with FAT32 partition.
3. Copy the whole content from the zip file to the USB flash disk.
4. Insert the USB flash disk into the **USB2** port (the USB1 port is not usable for the OS reflash process).
5. Press and hold the button next to connector labels.
6. Power up the controller.
7. The Axon will start the OS reflash process which is indicated by progressively blinking LEDs. The button can now be released.
8. After the procedure is finished, the LEDs stop blinking. Axon will automatically reboot to the normal state.