## Models: Unipi Patron S107, S117, S167, S207, M207, M267, M527, M567, L207, L527

## PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

## WARNING

The unit can be powered only by a power source in compliance with the unit's specifications. Using an unsuitable power supply can result in damage to the unit or connected devices. Unplug all power supplies and voltage sources before any manipulation with the unit – danger of electrical injury or component damage!

Do not use the controller in potentially explosive environments! The controller can be installed only by trained personnel with sufficient qualification. The unit can be installed only in a suitable environment following the product's technical specifications (indoor space with suitable temperature and humidity, waterproof distribution boxes, etc.).

All connected peripherals should comply with all standards and regulations relevant to the country and the intended use.

# Working conditions

Power supply (SELV)	24 V DC	Ingress protection (IEC 529)	IP20
Power consumption	Max: 12 - 20 W (see the unit's datasheet)	Working and storage temperature	Working: 0 °C +55 °C Storage: -25°C +70°C
Power supply pole reversal protection	Ano	Installation	On a 35mm DIN rail in a distribution box (holder included)



## **Compliance information**

Unipi Patron complies with the requirements of EMC, LVD and RoHS regulations relevant for European Union states.



### WEEE Directive Statement for the European Union Unipi Patron units cannot be disposed of as household waste. Different rules for handling electric waste may apply in other jurisdictions.

General info www.unipi.technology Technical support, Knowledge Base https://kb.unipi.technology

# **First steps**

### Software

Unipi Patron unit is based on OS Linux (Debian). Unipi provides several OS images containing different pre-installed applications. The default image is Mervis OS containing Mervis RT and all necessary files for the unit to operate. The image can be reflashed (see below) with a custom image, or with one of the pre-assembled images available on the Knowledge Base.

Mervis OS: SSH access is disabled by default. It can be activated using service mode or via the Mervis IDE. The default login info for SSH access is username: "unipi", password: "unipi.technology". We strongly recommend changing the login credentials immediately after SSH activation. For more detailed info, please visit https://kb.unipi.technology

### Unipi Patron unit startup

- 1. Connect the unit to a local network using a network cable (RJ45).
- 2. Connect a power supply compliant with the unit's product label. Wait for at least 20 seconds until the unit fully boots up.
- 3. Upon startup, the unit will automatically attempt to obtain an IP address from the DHCP server. If the attempt is unsuccessful, the unit will use a random IP address from a range of 169.254.0.0/16. A default static IP address can be assigned in the service mode.
- 4. An mDNS record is simultaneously published into the network, making the unit available under a unique name. E.g:Patron S107 with serial number 123, would be accessible at "http://s107-sn123.local". The serial number can be found on the unit's product label.
- 5. Mervis OS only: the default web page will be displayed upon entering the URL into a web browser. This page can be edited in Mervis IDE.

### Service mode

Service mode is a web tool for IP configuration, (de)activation of Mervis and SSH services, reflashing of OS images, creation of OS backup to USB flash disk and other useful functions. To activate the service mode, follow these steps:

- 1. Remove any connected USB flash drives and connect the unit to a local network or directly to your PC, using a network cable.
- 2. Press and hold the "SERVICE" button on the unit's top side.
- 3. Connect a power supply. All outputs are set to their default configuration, all outputs are disabled by default.
- 4. Patron will boot into a service mode indicated by slow blinking of all LEDs in both upper and lower rows (only Section 1 on M and L units). You can now release the button.
- 5. The unit will set its own IP address to 192.168.200.200 while simultaneously attempting to obtain an IP address from the DHCP server. The unit will be then available at both IP addresses.
- 6. To access the service web interface, use a web browser and enter the IP address http://<ip-address>

## Reflashing the operating system

The operating system can be reflashed via the service web interface or by using a USB flash disk. Caution: Reflashing will delete all data stored in the unit's onboard memory storage.

Download and extract the selected ZIP archive with Patron OS image from Knowledge Base (https://kb.unipi.technology) to your PC or use files from USB backup.

#### Reflashing the OS using service web interface

- 1. Switch the unit into the service mode (see above).
- 2. Drag only the archive.swu file from the extracted archive and drop it into the Software Update dialogue in the service web interface.
- 3. Wait until the process is finished reflash progress can be seen in the Software Update dialogue.
- 4. The unit will automatically reboot upon successful OS image reflashing procedure.

### Reflashing the OS using USB flash disk

- 1. Prepare an USB flash disk with at least 2GB of free memory (FAT32 format).
- Copy all extracted files from OS image to the USB disk or use the USB flash disk with backup files.
  Insert the USB flash disk into one of unit's USB port.
- 4. Press and hold the "SERVICE" button on the unit's top side.
- 5. Connect power supply.
- 6. Patron will start reflashing the OS, the process is indicated by rapid blinking of all LEDs in both the upper and lower rows (only in Section 1 on M and L units). You may now release "SERVICE" the button.
- 7. LEDs will stop blinking once the reflash is completed. The unit then automatically reboots.

Caution: Some USB flash disks may not be compatible. If your flash disk does not work, try another one or reflash the OS using service web interface.