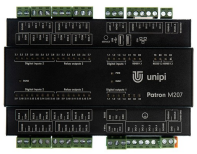


unipi Patron S107 Programmable Logic Controller and Gateway Instructions

unipi technology

S107 Programmable Logic Controller and Gateway Instructions

Quick instructions and safety information

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

CAUTION

The unit can be powered only by a power source in compliance with the unit's specifications. Using 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!

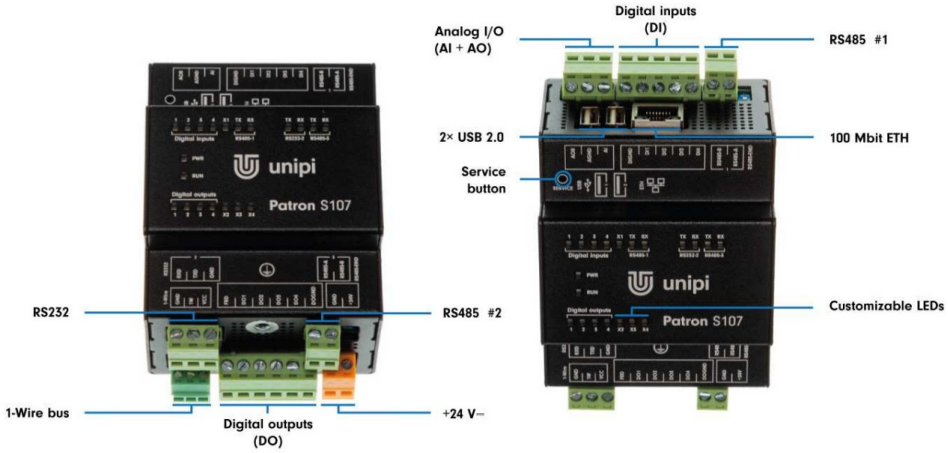
Do not use the controller in potentially explosive atmospheres! The controller can be installed only by trained personnel with sufficient qualification. The unit can be installed only in a suitable environment following the product's technical specifications (interior with suitable temperature and humidity, switchboards protected against water intrusion, 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	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		Yes	Installation	On a 35 mm DIN rail in a distribution box (holder included)
GSM*	DSC1800 GSM900	UL f: 1710,2–1784,8 MHz UL f: 880,0–914,8 MHz	DL f: 1805,2–1879,8 MHz DL f: 925,0–960,0 MHz	radiofrequency power (max.) 1 W radiofrequency power (max.) 2 W
		UL f: 1920–1980 MH UL f: 1710–1785 MH UL f: 2500–2570 MHUL f: 880–915 MHz UL f: 832–862 MHz UL f: 703–748 MHz	DL f: 2110–2170 MHz DL f: 1805–1880 MHz DL f: 2620–2690 MHz DL f: 925–960 MHz DL f: 791–821 MHz DL f: 758–803 MHz	radiofrequency power (max.) 24,5 dBm radiofrequency power (max.) 24 dBm radiofrequency power (max.) 24 dBm radiofrequency power (max.) 24 dBm radiofrequency power (max.) 25 dBm radiofrequency power (max.) 24 dBm
LTE*	Band 1 Band 3 Band 7 Band 8 Band 20 Band 28 Band 38 Band 40	UL f and DL f: 2570–2620 MHz UL f: and DL f: 2300–2400MHz		radiofrequency power (max.) 24,5 dBm radiofrequency power (max.) 24,5 dBm

*** Only LTE models**



First steps

Software

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

Marvis OS: SSH access is disabled by default. It can be activated using service mode or via the Mervin IDE. The default login information for SSH access is username: "unripe", 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 drive 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 on section 1 (except PWR and RUN). 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.

Reflashing the operating system

The operating system can be reflashed via the service web interface or by using a USB flash drive.
Download and extract the selected ZIP archive with Patron OS image from Knowledge Base (**https://kb.unipi.technology**) your PC or use files from USB backup.

CAUTION

Rehashing will delete all data stored in the unit's onboard memory storage.
Rehashing the OS using service web interface

1. Switch the unit into the service mode (see above), indicated by slow blinking of all LEDs on section 1 (except PWR and RUN).
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. Patron will start rehashing the OS, the process is indicated by rapid blinking of all LEDs on section 1 (except PWR and RUN).
4. Wait until the process is finished – rehash progress can be seen in the Software Update dialogue.
5. The unit will automatically reboot upon successful OS image rehashing procedure.

Reflashing the OS using USB flash drive

1. Prepare an USB flash drive with at least 2 GB of free memory (FAT32 format).
2. Copy all extracted files from OS image to the USB disk or use the USB flash drive with backup files.
3. Insert the USB flash drive 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 rehashing the OS, the process is indicated by rapid blinking of all LEDs on section 1 (except PWR and RUN). You may now release "SERVICE" the button.
7. LEDs will stop blinking once the rehash is completed. The unit then automatically reboots.

NOTE

Some USB flash drives may not be compatible. If your flash drive does not work, try another one or rehash the OS using service web interface.

RoHS

CE **Compliance information**

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

WEEE Directive Statement for the European Union Unifi Patron cannot be disposed of as household
Unifi Patron cannot be disposed of as household waste. Different rules for handling electric waste may apply in other jurisdictions.
Hereby, Faster CZ slop. s row. (brand Unifi technology) declares that the radio equipment type S167 LTE/M267 LTE/M567 LTE is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **https://www.unipi.technology/doc/**

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Documents / Resources

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S167 LTE, M267 LTE, M567 LTE, Patron S107, Programmable Logic Controller and Gateway, Patron S107 Programmable Logic Controller and Gateway, Controller and Gateway, Controller, Gateway

References

- Knowledge Base - Unipi technology [Unipi.technology Knowledge Base]