MIKROTIK

netPower Lite 8P

Low-cost. Tough. And always ON!

Compact PoE switch with built-in UPS and smart battery charger – because your CCTV cameras and access points deserve true off-the-grid resilience.



8× Gigabit Ethernet

802.3af/at PoE-Out

2× 10G SFP+ uplinks

24–57 V DC input
(2-pin terminal)

Built-in smart battery charger
(0.2–1.6 A, 20–31.7 V)

120 W total PoE-Out
budget with automatic priority

Integrated UPS switchover
for uninterrupted PoE devices

Temperature sensor included

Power cuts shouldn't mean downtime. The **netPower Lite 8P** delivers reliable Power-over-Ethernet even when the grid goes dark. The integrated UPS and smart charger work with your external 24 V battery – and can deliver high-voltage PoE-out even from low-voltage DC sources, making the netPower a perfect match for CCTV, offices, apartment buildings, and smart-city installations.

The netPower Lite 8P comes with eight **Gigabit Ethernet** ports featuring **802.3af/at PoE-Out**, plus **two 10G SFP+ uplinks** for high-speed backhaul. It runs SwOS Lite – fast, efficient, and refreshingly simple to manage. Power input is flexible: just feed **24–57 V DC** into the 2-pin terminal.

Just like our other outdoor-friendly gear, this switch is built to endure. With an operating range of **–40 °C to +70 °C**, the netPower Lite 8P keeps delivering where many devices would already be giving up. The switch can draw up to **181 W total**, with a **120 W PoE-Out budget**. When incoming power is limited, PoE is prioritized automatically – charging slows down first to keep your essential devices online.



IP54-rated enclosure

Check out our YouTube and TikTube videos for this product!

Built-in UPS support: effective, reliable, gives you options

Connect a 24 V nominal battery – typically two 12 V units in series – and the switch instantly becomes a small, efficient UPS. During a power outage, PoE devices stay online without any interruptions.

The charger supports **flooded, AGM, and gel-based lead-acid batteries,** as well as **LiFePO$_4$** (Lithium Iron Phosphate Battery) packs with proper BMS. The charger subsystem is designed for charging batteries through the 2-pin header in a current range 0.2-1.6 A, and at a voltage range of 20 to 31.7 V.

Charging is handled intelligently through **three stages**:

1. Bulk – rapid charging

2. Absorption – steady top-off

3. Float – optional maintenance voltage

A temperature sensor is included; it fine-tunes voltage for lead-acid batteries and blocks charging when temperatures drift outside a safe range. This helps prolong battery life.

Battery safety tips

Chemical batteries can be an amazing tool in the right hands or quite dangerous if installed incorrectly. The netPower Lite 8P gives you flexibility, but certain rules must be followed.

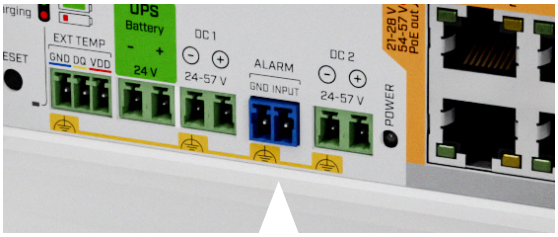
#1 For $LiFePO_4$ batteries, it is crucial to have an external Battery Management System that provides cell balancing, over/under-voltage protection, current protection, and temperature protection. The internal charger does not replace those functions.

#2 Lead-acid batteries require ventilation. Charging can release small amounts of hydrogen gas; in a sealed space it can accumulate and become explosive. AGM and gel batteries are sealed and safer for indoor use, but still benefit from basic airflow.

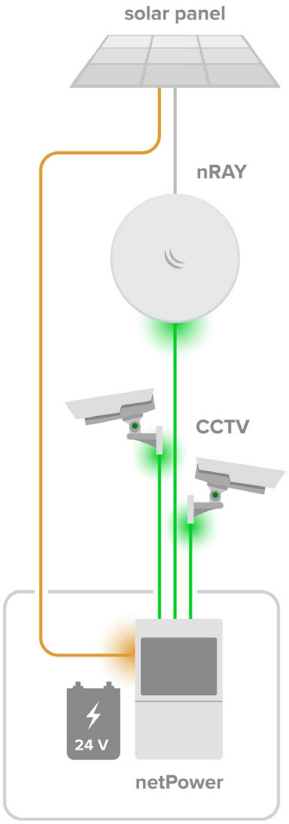
#3 The battery negative terminal must not be connected to the board or DC supply ground potential! The negative terminal must be isolated from ground potential as it is used for current measurement and charger feedback. Otherwise, the battery status will be measured improperly and the charger will function abnormally.

#4 While charging, **following battery manufacturer guidelines is of utmost importance**. Some battery chemistries can be charged at rates of 2C, while some have limits of just 0.2C

#5 Ensure the correct polarity for all connections – power supply, battery, temperature sensor. And don't forget to keep the connections and batteries safe from weather, temperatures, and tampering.



Alarm input: connect a simple 2-wire contact to detect tampering, and the device will report it instantly in SwOS and over SNMP. You can pair it with a RouterOS device for additional automation or creative scripting triggers.



Typical deployment: powering cameras and wireless backhaul from a single UPS-enabled switch with zero downtime in the long run.

Perfect for WISPs, CCTV, apartments, utilities, and smart-city networks

Whenever uptime matters (and budgets!), the netPower Lite 8P gives you a clean, reliable, scalable solution. You get PoE, backup power, smart monitoring, and rugged outdoor performance in one compact device.
So if you value every watt and every second of uptime – the netPower Lite 8P is ready to keep you online...even when the lights go out.

Specifications

Product code	CSS610-8P-2S+OUT
Storage	64 MB, Flash
Number of 1G Ethernet ports	8
Number of 10G SFP+ ports	2
Switch chip model	88E6193
Dimensions	303 x 212 x 78 mm
Operating system	SwOS
Operating temperature	-40°C to +70°C

Powering

Number of DC inputs	3 (3x 2-pin terminal)
2-pin terminal input Voltage	24-57 V
2-pin terminal input / output (Battery) Voltage	22-30 V
PoE-Out	802.3af/at
PoE-Out ports	Ether1-Ether8
Low voltage PoE-Out current limit	1000 mA
High voltage PoE-Out current limit	640 mA
Total output power	120 W
Max power consumption (without attachments)	7 W
Max power consumption	181 W

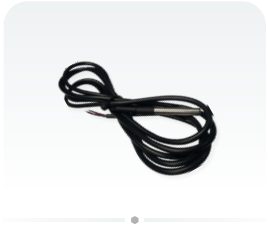
Included parts



Hose clamp



Fastening set



Temperature sensor

Suggested power supplies (not included)



MTP250-53V47-OD (53V) or
MTP250-26V94-OD (26V)