

Buffer module for IP PoE devices

24 Wh battery, IP68 outdoor enclosure

miniUPS-25-1-CA1 is a compact backup power module designed to provide emergency power for PoE-powered devices, particularly IP cameras. The module is housed in an outdoor ABOX-CA1 enclosure (IP68) and features a built-in 24 Wh battery.

The device ensures uninterrupted operation of PoE IP cameras in the event of power loss or cabling failure. With instantaneous switchover to battery power, it prevents video loss and monitoring interruptions. Even without a connection to the main recorder, the camera can continue recording footage locally on its internal memory card.

The primary purpose of the miniUPS is to provide backup power for a PoE-powered IP camera. Installed close to the powered device, the module ensures uninterrupted operation and improves system resilience against communication failures as well as accidental or intentional cable damage.

A dedicated START button allows PoE output to be activated without connecting input power. This is particularly useful for configuring IP cameras without the need for a PoE switch.

The device features an IP68 outdoor enclosure, enabling it to operate in outdoor conditions.



FEATURES:

- backup power support for PoE devices
- built-in 24 Wh battery
- ability to start the device from battery power
- IP68-rated outdoor enclosure
- low power consumption



TECHNICAL SPECIFICATION:

LAN Ports	1x LAN PoE IN RJ45 10/100/1000Mbps 1x LAN+PoE OUT RJ45 10/100/1000Mbps
Ports Functions	LAN + PoE IN PoE input (switch power supply): 802.3af (up to 15W) or 802.3at (up to 30W) PoE PINS: 1,2 (V+/-) 3,6 (V+/-) and/or 4,5 (V+/-) 7,8 (V+/-) LAN + PoE OUT PoE LAN output: 802.3af/at PoE PINS: 1,2 (V-) 3,6 (V+) 4,5 (V+) 7,8 (V-) IMPORTANT! The ports on the device operate in pass-through mode. This means that if the power supply operates under the 802.3bt standard (60 W) and the PoE receiver also supports this standard, the miniUPS will be able to deliver up to 60 W to the device.
Battery	24 Wh, 2x LiFePO4 18650 3.6V / 3350 mAh (connected in series)
Battery charging current	300 mA
Output voltage	When powered by a PoE switch: Vout = Vin When operating on battery: Vout = 42 V +/- 1% Upon activation via the START button: 48 V +/- 1%
Power consumption	0,25 W
Maximum power	30 W
Input Voltage	44 ... 58 VDC

Protection	Surge protection, Battery discharge protection, Battery overload protection
Start-up without the input power	START button
Indication	Red LED (constant) – operating via the PoE switch, power supplied via the LAN port + PoE IN Red LED (blinking) – operating via battery, power supplied via the battery
Housing Construction	ABOX-CA1 enclosure: Enclosure material – plastic, light grey UV-resistant Cable glands: 1 x M25 Cable gland insert: 2 holes, each 6 mm in diameter (6Ø)
Assembly	Wall-mounted via mounting holes; can be mounted on a pole using the optional ADD-PMACA1 adapter
Ingress Protection Rating	IP68
Operating Temperature	-25 ... +65°C
Dimensions	165 x 65 x 55 mm
Weight	0,33 kg

A basic application of the miniUPS-25-1-CA1 for providing backup power to a single PoE IP camera.

