

Installation and commissioning

Instructions for installation and commissioning.

Instruction No: 350-277

Name, article number and e-number

Table 1. Name, article number and email number.

Name	Article number	E-number (SE)
PoE Switch 8p PS OUT S	PL02P00048P050P-UTS	51 73 418

PoE



[sv] Om

[sv] PoE Switch 8p PS UT S är en strömförsörjning med PoE för utomhusbruk. Byggt för att klara nordiska förhållande - sommar som vinter. Produkten skiljer sig från inomhus-batteribackuper från Milleteknik och vissa funktioner har tillkommit och andra har fallit från.

Revisions and the edition of this document

The current and most recently published edition of this document is available at www.milleteknik.com.

The validity of this document can not be guaranteed, as new editions are published without prior notice.

Original instructions for use: Swedish.¹

Instructions for use, technical data and translations thereof may contain errors. It is always the responsibility of the installer to install the product in a safe manner.

¹Translations in languages other than Swedish are indicative only and not verified. Translation should always be checked against the Swedish original to ensure accurate information

Symbols

Table 2. Symbol Explanation

Symbols	Name	Explanation
	Warning	Risk of electric shock, improper installation or hot surfaces. Appears in some manuals
	Note	Used for supplementary information that clarifies the text.
	Caution/Important	Indicates the risk of equipment damage or malfunction. Also used for information that is important but not security-related
	Tips	Displays practical advice or shortcuts for installation, operation, or service.
	CE marking	The product complies with applicable EU directives and harmonised standards.
	Read the manual	Please read manual before installation and service.
	Do not dispose of in household waste	The product is covered by the WEEE Directive and must not be disposed of with household waste, it must be recycled and delivered to a recycling centre.
	Recycling	Packaging, products and other materials that do not contain electronics must be recycled in accordance with local environmental regulations.

Installation — general information

Installation shall be carried out by a competent electrician in accordance with the applicable national electrical installation rules.

The product is of protection class I and must be connected to a grounded 230 V AC circuit.

- A main switch according to IEC 60947-1 shall be provided in the fixed installation. The switch should be easily accessible and clearly marked with its function.
- The area of the supply cable shall be at least 1,0 mm² and fitted with a fuse T 2,5 A (slow-blown) or equivalent.
- AC and low voltage cables must not be pulled together. Keep separate cable chutes or bundles
- Check that protective earth (PE) is properly connected before turning on voltage.
- Ensure free air circulation around the enclosure at least 100 mm, unless otherwise specified. Ventilation openings must not be covered.
- The product is intended for indoor installation in normal environment (pollution number 2 and indoor class 1).

These general requirements apply to all Milleteknik products with 230 V mains connection.

Requirements for main switch, fuse and cable area

In order to comply with applicable electrical safety requirements, the installation shall be equipped with a main switch according to IEC 60947-1.

Table 3. Main switch and fuse

Component	Requirements
Main switch	A main switch according to IEC 60947-1 shall be included in the installation and be easily accessible. Separated phase (L) and neutral (N)

Component	Requirements
Fuse	The supply circuit shall be protected by a fuse or automatic fuse with rated current according to the product specification (normally T 2,5 A slow-blow or equivalent). Refer to the device's nameplate.
Fuses	Approved type according to IEC 60127.
Cross-sectional area (230 V)	At least 1,0 mm ²
Cable length	In the case of longer wiring, voltage drops should be taken into account so that the operating voltage does not fall below 230 V ± 10% at the unit.
Strain relief	All cables must be properly secured and strain relief checked before energizing the unit.

These requirements apply to all Milleteknik products with 230 V mains connection.

The table below shows recommended cable area for low current installations at different voltages, current strengths and cable lengths. Values are based on copper cable and a maximum voltage drop of approximately 3% to ensure operational reliability.

Enclosures

General assembly instructions

- The enclosure shall be mounted vertically.
- For good ventilation, at least 100 mm of free space should be provided above and on the sides of the enclosure.
- The device should be mounted at a comfortable working height, normally between 1.4 and 1.8 m.
- Avoid placement in direct sunlight, near heat sources, or in environments with high humidity or dust.
- Installation shall be carried out in accordance with the applicable installation rules and by a competent installer.

MOUNTING - WALL MOUNTING

- Recommended distance between screw head and wall should be 1.5-2 mm.
- Do not block the flow of air on the sides.

OUTDOOR MOUNTING ON POLE

- The product is intended for mounting on a pole with rails or corresponding fastening parts.
- Use rails and fasteners that are compatible with the weight and mounting pattern of the product.
- Install the rails in the product before installing the post brackets or pipe clamps.
- Place pipe clamps or corresponding fastening parts around the post and connect them to the mounting points of the rails.
- Check that the product is aligned and mounted in a vertical position before tightening.
- The diameter and material of the post should be suitable for the selected type of fastening detail.
- Tighten all screws and nuts according to the recommendations of the fastening details.
- Ensure that the product is firmly fixed and cannot rotate or slide on the post after assembly.
- Cable connections should be oriented downwards or according to the specific installation instructions of the product.
- Avoid locations where water can flow directly onto the enclosure from surfaces above.

[sv] Monteringshål, avstånd och ø.

Table 4. [sv] Mått

[sv] Kapsling, mått (BxHxD).	[sv] Monteringshål, avstånd (B x H) invändigt i skåpet	[sv] Monteringshål, fästen, utanför skåpet
[sv] 300 x 250 x 141 mm	[sv] -	[sv] - ^a

^aMonteras på stolpe, se stolpfäste för mer information.

[SV] VIKT MED BATTERIER

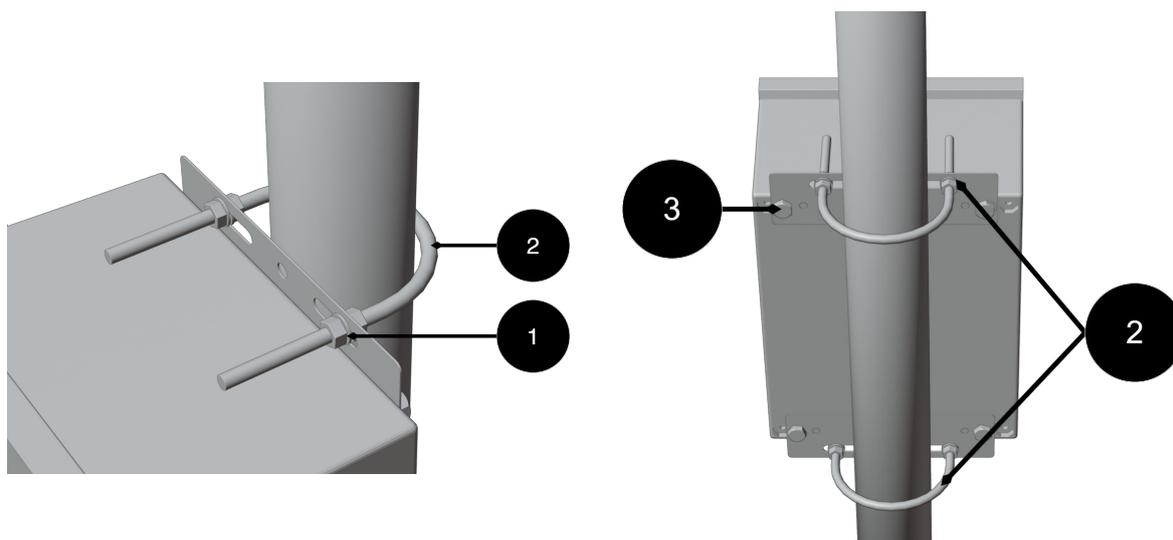
Table 5. [sv] Vikt

[sv] Nettovikt utan batterier	[sv] Batterityp	[sv] Antal	[sv] Batterier / vikt per styck	[sv] Vikt med batterier
[sv] -	[sv] 14 Ah	2	[sv] 4,2 kg	[sv] Vikt + 8,4 kg

Outdoor mounting on pole

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- Cable connections should be oriented downwards or according to the specific installation instructions of the product.
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Mounting on pole



Mounting on pole

Assemble in this order:

1. Place the mounting plates (3) on the upper and lower attachment points of the enclosure and attach them lightly with the screws provided. Do not tighten finally yet.
2. Pass the lower U-bolt (2) around the post and through the holes in the lower mounting plate. Install washers and nuts. Tighten lightly.
3. Pass the upper U-bolt (2) around the post and through the holes in the upper mounting plate. Install washers and nuts
4. Adjust the position of the enclosure so that it is in solder and centered toward the post.
5. Tighten all nuts in sequence: — lower U-bolt — upper U-bolt — screws to the mounting plates
6. Check the attachment by lightly loading the enclosure forward/backward to ensure stable mounting.

Component overviews

Component Overview Mounting Kits

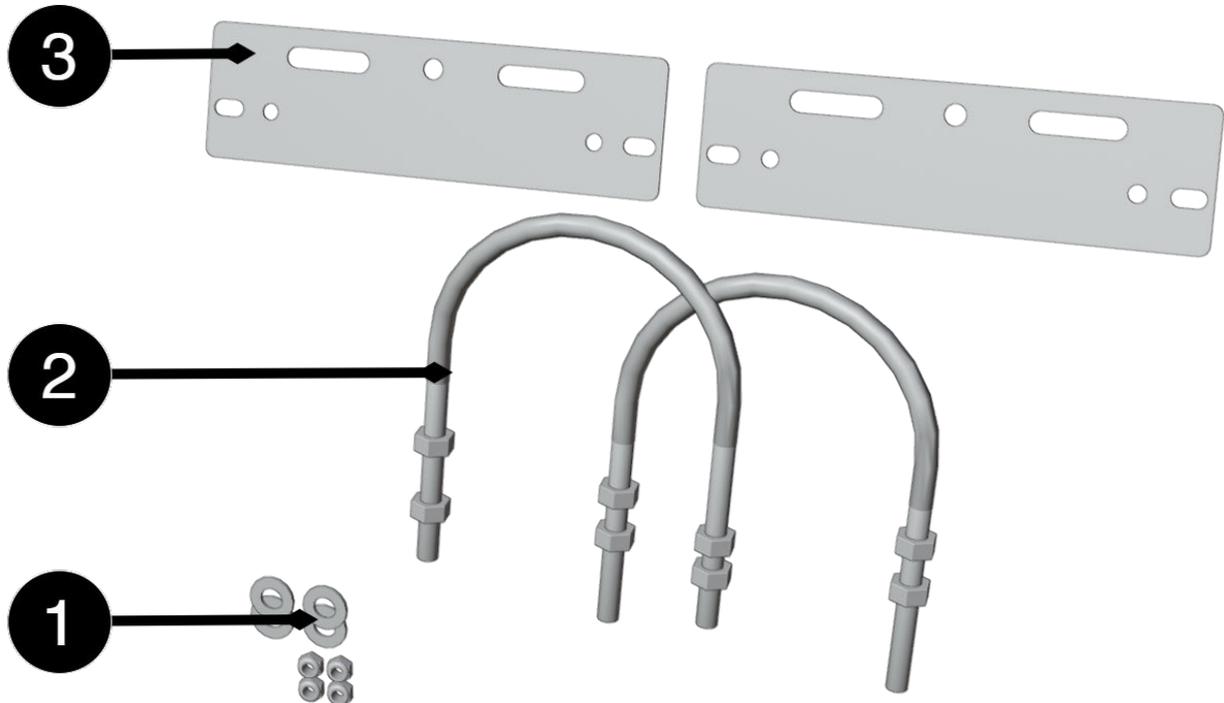


Table 6. Component Overview

No.	Explanation
1	Fixing plate
2	U-bolt for pole
3	Washers and nuts

Component overviewNOVA FLX L

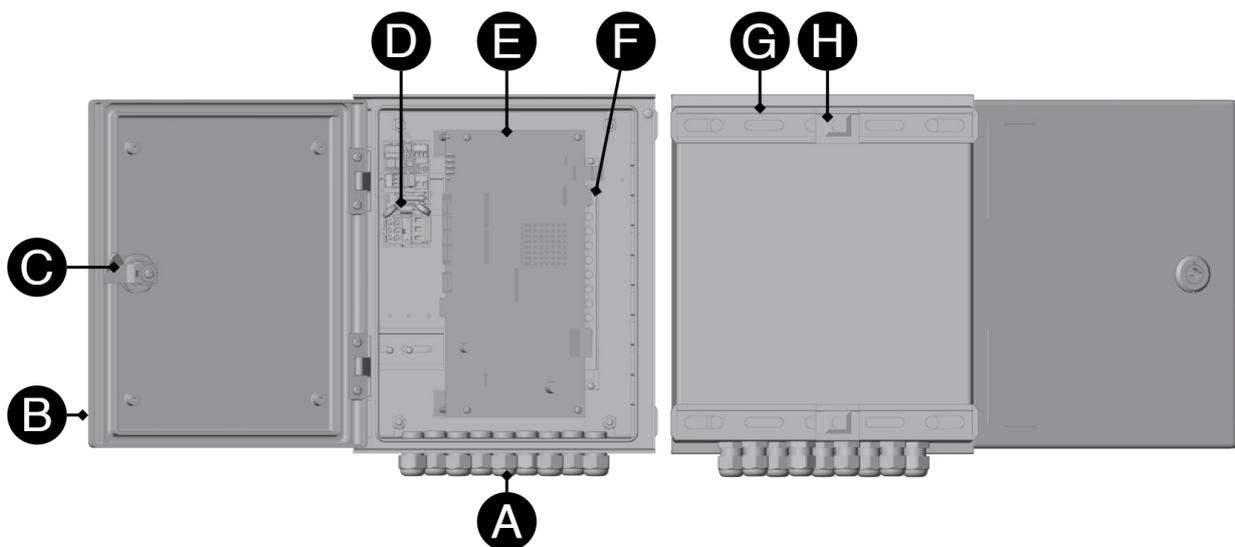


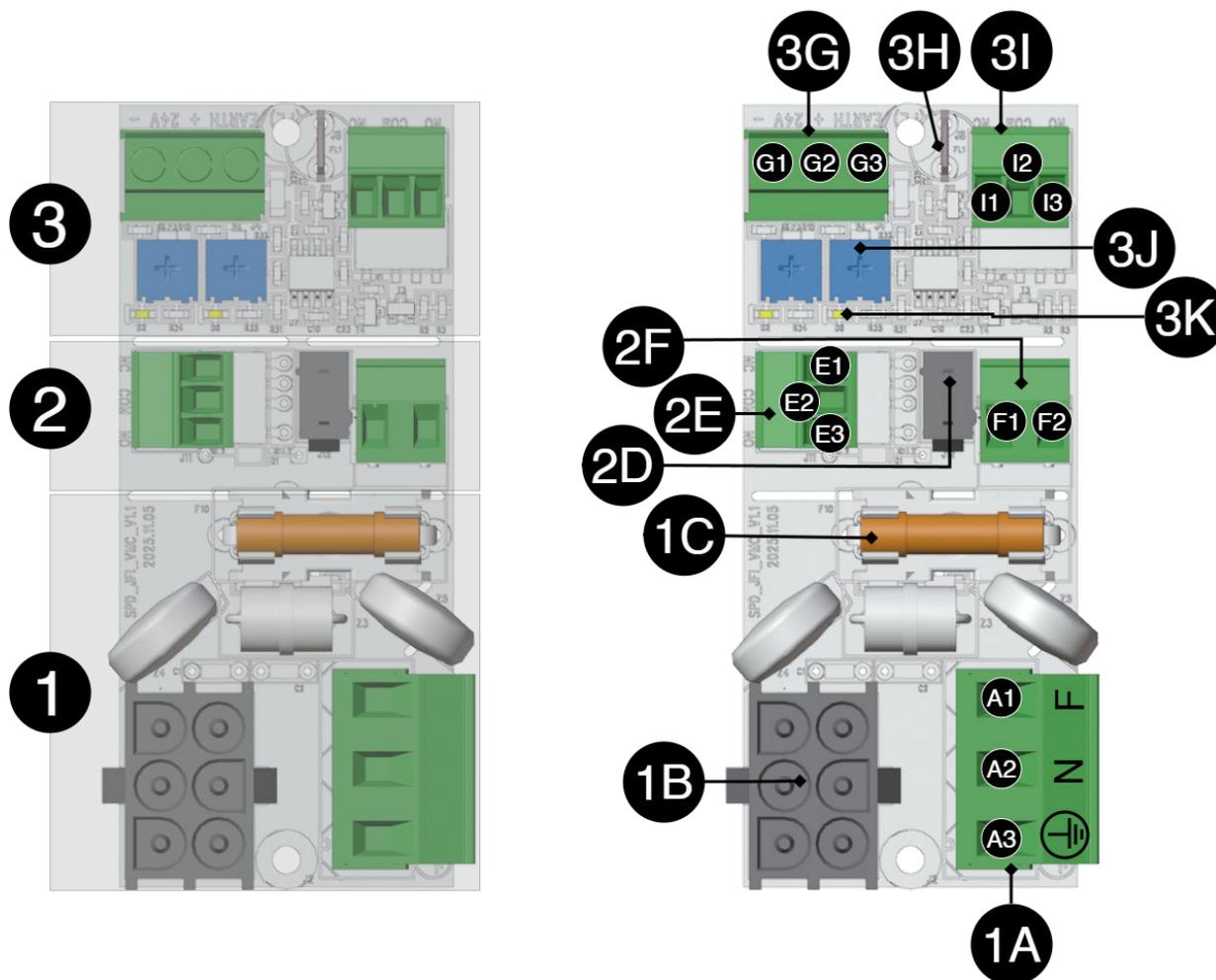
Table 7. Component Overview

Letter	Explanation
A	Cable grommets.

Letter	Explanation
B	Door.
C	Lock.
D	Plugging/lightning protection board.
E	Poe card.
F	Power supplies.
G	Bracket on the back.
H	Fastening screw.

[sv] Kortbeskrivning 230 V inkoppling, 24 V DC ut och åskskydd

Figure 1. [sv] Kortet är tredelat och kan delas upp för att erhålla önskad funktion.



[sv] Kortet har tre delar, det är inte säkert att alla konfigurationer har alla delar av kortet.

Table 8. [sv] Kortbeskrivning, del 1.

[sv] Beteckning	[sv] Förklaring
[sv] 1A	[sv] Inkoppling 230 V AC inkommande.
[sv] A1	[sv] Fas (F)
[sv] A2	[sv] Neutral (N)
[sv] A3	[sv] Jord (PE)
[sv] 1B	[sv] Inkoppling till nättaggregat.
[sv] 1C	[sv] Nätsäkring.

Table 9. [sv] Kortbeskrivning, del 2.

[sv] Beteckning	[sv] Förklaring
[sv] 2D	[sv] 24 V DC strömmatning från nätaggregat.
[sv] 2E	[sv] Larm
[sv] E1	[sv] NC
[sv] E2	[sv] COM
[sv] E3	[sv] NO
[sv] 2F	[sv] 24 V ut.
[sv] F1	-
[sv] F2	+

Table 10. [sv] Kortbeskrivning, del 3.

[sv] Beteckning	[sv] Förklaring
[sv] 3G	[sv] 24 V DC in
[sv] G1	-
[sv] G2	+
[sv] G3	[sv] PE
[sv] 3H	[sv] Extern jordanslutning (i kapsling/jord).
[sv] 3I	[sv] Larm
[sv] I1	[sv] NO
[sv] I2	[sv] COM
[sv] I3	[sv] NC
[sv] 3J	[sv] Potentiometer, ställbar +/-
[sv] 3K	[sv] LED, lyser gult vid jordfel.

[sv] Inkoppling av strömmatning

[sv] 230 V kopplas in på plint 1A.

[sv] Anslut matningsspänning, 230 V AC

[sv] Matningsspänning kopplas in på plinten.

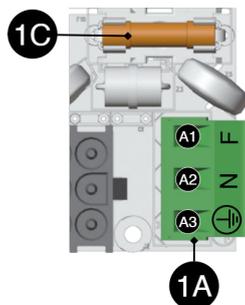


Table 11. [sv] Kortbeskrivning, del 1.

[sv] Beteckning	[sv] Förklaring
[sv] 1A	[sv] Inkoppling 230 V AC inkommande.
[sv] A1	[sv] Fas (F)
[sv] A2	[sv] Neutral (N)
[sv] A3	[sv] Jord (PE)
[sv] 1C	[sv] Nätsäkring.

[sv] Driftsättning - hur enheten skall startas



DANGER

Personal injury or death can occur if the device is connected to the mains or live when disassembling / moving.

1. [sv] Anslut last.
2. [sv] Anslut nätspänning.
3. [sv] Koppla in nätspänning.

Maintenance

The system with the exception of batteries is maintenance-free when installed in an indoor environment.

Product sheet - power supply / battery backup

Product sheet - power supply from Milleteknik

POE



NAME, ARTICLE NUMBER AND E-NUMBER

Table 12. Name, article number and email number.

Name	Article number	E-number (SE)
PoE Switch 8p PS OUT S	PL02P00048P050P-UTS	51 73 418

AREA OF USE

Power supply to power PoE devices such as surveillance cameras and other PoE powered devices.

Long life, energy efficient and support is available if something goes wrong, now or in 10 years.

COMMON USES

- Supports IP cameras, readers, door centers and other networked security devices
- Power and data distribution over a single network cable for simplified installation.
- Used to power IP-based access systems where both data and power go through network cabinets.

TECHNICAL DESCRIPTION

PoE switch with eight PoE fed ports and two LAN ports and one sfp port. Power supplies power PoE cards. The device lacks batteries, so backup power in case of power failure is not possible

VOLTAGE, CURRENT AND POWER

Mains voltage: 230 V AC - 240 V AC, 47 Hz - 63 Hz.

Power: 240W and 30.8W per port. 48V power supply directly from power supply.

Self-consumption is the power outlet the circuit board has when the system is deployed and in battery operation.

Table 13. Self-consumption

Circuit Boards	Self-consumption (in battery operation)	Comments
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[sv] Extra utspänning, 24 V, 8,5 A / 200W.

LOAD OUTPUTS

PoE switch can drive load to PoE devices and external power supply can drive one (1) 24 V load output to power other applications.

PROTECTION

Protection against: Overvoltage, overtemperature and short circuit.

INDICATIONS AND COMMUNICATION

Communication via software in switch. Indications on LEDs on switch

ENCLOSURE

Box in fiberglass reinforced acrylic plastic.

Table 14. Dimensions, with and without packaging.

Dimensions, height x width x depth. ^a	Dimensions with packaging.
300 x 250 x 141 mm.	515 x 415 x 308 mm

^aDimensions of product and packaging may differ, this is because the product may lie differently in the packaging.

Table 15. Height units, fan and IP class.

HE	Built-in fan	IP class
7 ^a	No	IP20

^aCannot be mounted in a 19" rack.

WEIGHT

Table 16. Weight.

Name	Net weight	Weight incl. packaging
PoE Switch 8p PS OUT S	-	-

INSTALLATION REQUIREMENTS

The device is intended for fixed installation. Ambient temperature: – 15°C to +35°C.

REQUIREMENTS THAT THE PRODUCT MEETS

Table 17. The product meets the following requirements.

EMC:	EMC Directive 2014 / 30EU
Electricity:	Low voltage directive: 2014/35 / EU
CE:	EC Directive in force: 765/2008
Emissions:	
Immunity:	EN61000-6-2:2005, EN61000-4-2, -3, 4, -5, -6, -11 SS-EN 50 130-4:2011 Edition 2, EN50131-6
Machinery Directive	The product is part of electrical systems, is subject to the relevant electrical and safety directives and is not a machine according to the Machinery Directive (2006/42/EC).
Ecodesign	Milleteknik's products are intended for professional use and are therefore not directly covered by the Ecodesign Regulation (EU 2019/1782). As some components may be covered, we nevertheless disclose relevant information to give our customers confidence in their choice

Efficiency (%) ^a	Standby consumption, typical (W):
93%, 94%	0.5W, 0.5W

^aAt rated load.



GUARANTEE

The product has a two-year warranty for manufacturing defects. Components that are manufactured by a manufacturer other than Milleteknik are not covered by Milleteknik's warranty.

EXPANDABLE, OPTIONS AND ACCESSORIES

The product cannot be expanded.

MANUFACTURING, LIFESPAN, ENVIRONMENTAL IMPACT AND RECYCLING

Manufactured by Milleteknik in Partille, Sweden.

The product is designed for a long service life, which reduces the environmental impact. End-of-life products are handed over to the nearest recycling centre.

LINK TO TECHNICAL SPECIFICATIONS

LINKS TO MANUALS AND PRODUCT SHEETS

You can find manuals and product sheets at: www.milleteknik.se The QR code below takes you to the product page.

Name	Dimensions	Batteries that fit	Link
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Batteries are only included if specified, otherwise batteries will need to be purchased separately.

MISCELLANEOUS

The difference between PoE, PoE+ and PoE++.

Table 18. Max power PoE.

-	PoE	Poe+	PoE++
Compatible ^a	-	PoE	PoE, PoE+
Official name	IEEE 802.3af	IEEE 802.3at	IEEE 802.3bt
Maximum power	13 W	25 W	71 W

^aThe power supply follows "up", but not "down". A PoE can never power a PoE+/PoE++ device that requires more than 13 W.

ABOUT THIS INFORMATION

All information is published subject to possible errors. Information is updated without prior notice.

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