

# PoE Injector 1p S

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## 1. ABOUT POE FROM MILLETEKNIK

The series is designed to power PoE devices such as access systems, surveillance cameras and other equipment that can be operated with Power over Ethernet.

## 1.1. PoE injector 1p S



The picture shows PoE injector 1p S with battery, (not included)

1.2. How the PoE injector powers devices connected to the power supply



The PoE injector can drive, for example, a surveillance camera.

Connect external device to be powered via PoE injector.



## NOTE

IN must be connected to the left and OUT to the right.

## 1.3. Component overview PoE injector 1p S



#### Table 1. Component overview

Symbol	Explanation
А	Casing in powder-coated sheet metal.
В	Space for battery.
С	Power supply unit.
D	PoE injector.
Е	Cable entries.



## 1.4. Wall mounting

Use four screws suitable for the wall to mount the cabinet.

The distance between the screw head and the wall should be 1.5–2 mm.

Preferably leave a 100 mm air gap around the unit.



## 1.5. Connecting the battery

Battery wiring is mounted on the circuit board upon delivery. Pictures below only show how to connect wiring.

- 1. Place the battery in the cabinet with the battery terminals up.
- 2. Connect the battery cable. Red cable on plus and black cable on minus.
- If possible, disconnect mains voltage when replacing the battery.

Figure 1. Wiring diagram for batteries in battery backup



Connect the terminals correctly so that you do not damage the equipment.

## 1.6. Alarm card for PRO3

Relay card - description, connections and alarm outputs.



No	Terminal no	Explanation
1	J1	Port (RJ-45) LAN incoming.
2	J3	12 V power supply.
3	J2	Port (RJ-45) PoE (LAN + 12 V) outgoing.



#### WARNING

The card is powered for connection of PoE device on the output (3).

Figure 2. How the Injector card works



The card is fed with voltage, 12 v, and takes data into the same page. On the other side (DATA OUT) PoE device can be connected.

## 1.7. Commissioning - how to start the device

After connection, start-up must take place in the following steps:

- 1. Plug in batteries.
  - First connect cables from motherboard to battery terminals.
- 2. Connect load.
- 3. Plug in the mains.

The unit works normally when the indicator LED on the outside of the cabinet door lights up with a solid green light. See front panel for other status indications.

## 1.8. Product data sheet

#### 1.8.1. PoE

Figure 3. PoE injector 1p S



PoE injector with 1 port.

## **TECHNICAL SPECIFICATIONS**

These technical specifications are subject to change without notice.

## NAME, ARTICLE NUMBER AND E-NUMBER

Name	Article number	E-number (SV)
PoE injector 1p S	SM01000012P02001PU	51 719 50

More information



## ABOUT POE FROM MILLETEKNIK

The series is designed to power PoE devices such as access systems, surveillance cameras and other equipment that can be operated with Power over Ethernet.

#### **POE INJECTOR 1P S**

PoE Injector is used when the distance between PoE device and connection (switch) is too long. The PoE injector is a power injector that makes it possible to power PoE devices at longer distances. The battery in the unit continues to power the injector when the steady power supply is lost. The product must be used indoors and is not suitable for outdoor use.

## POWER OVER ETHERNET FROM MILLETEKNIK

- PoE for security applications.
- Proven, reliable technology.
- Swedish made.



## **AREAS OF USE**

- Power supply for camera surveillance and other applications that can be powered by PoE.
- To boost PoE powered devices.

#### **FIXED INSTALLATION**

The product is intended for fixed installation. The battery backup must be installed by a qualified installer.

#### **BATTERY TYPES**

The ECO series can be used with AGM batteries. Do not mix types of batteries, brand or used and new batteries.

#### 1.8.2. Regulations and certifications

## **REQUIREMENTS THAT THE PRODUCT MEETS**

EMC:	EMC Directive 2014 / 30EU
Electricity:	Low voltage directive: 2014/35 / EU
PoE:	IEEE 802.3af, IEEE 802.3at/30.8 W Note that 802.3at type2 is not supported, as the PoE card lacks a handshake function for type 2.
CE:	CE directive according to: 765/2008
Emission:	EN61000-6-: 2001 EN55022: 1998: -A1: 2000, A2: 2003 Klass B, EN61000-3-2: 2001 EN55022 (CISPR22) Class B, EN61000-3-2,-3

## CE

X

#### 1.8.3. Expected operating time in the event of a power failure (with new batteries)

PoE	Bat-	Power	Power	Power	Power	Power	Power	Power	Power
	tery	15.4 W	30.8 W	62 W	90 W	100 W	120 W	180W	240 W
PoE in- jector 1p S (12 V)	1 psc 7.2 Ah	3 h 50 min.	1 hour 40 mi- nutes	-	-	-	-	-	-

Prod- uct	Num- ber of PoE / LAN ports	Max power per port	PoE, contin- uous power	Ether- net type	Net- work ports	Interface	Func- tions	Type, injec- tor and switch
PoE in- jector 1p S	1/1	30,8 @ 54,6 V DC	30,8 W	Fast Ethernet Mbit PoE switch	10 / 100 PoE	1000Base-T RJ-45	Auto-ne- gotiation, Auto-up- link (auto MDI/MDI- X)	Unman- aged. There is no soft- ware inter- face to con- trol the switch.

#### **TECHNICAL DATA: POE CARD**

## THE PRODUCT LACKS ADVANCED CONTROL ELECTRONICS

This product does not have a motherboard.

1.8.5. Power supply

## **POWER SUPPLY - TECHNICAL DATA LRS-75-12**

In:				
PoE injector 1p S				
Output voltage	13.6 V			
Output voltage, ripple	120 mVp-p			
Overvoltage	13.8 V - 16.2 V			
Voltage recharge, ripple / current limitation	Less than 0.6 Vp-p			
Efficiency	89%			
Current limitation	110% - 150%			
Constant voltage	+/- 1.0%			
Regulatory accuracy	* / - 0.5%			
Input current (230 V)	6 A			
Mains voltage frequency	47 Hz- 63 Hz			
Mains voltage	85 V AC - 264 V AC			
Brand effect	72 W			
Heat generation at 50% of rated power	+/- 0.03% / ° C			
Heat generation at 80% of rated power	+/- 0.03% / ° C			

The power supply is adapted and calibrated with the battery / hardware of the battery backup. Only power and calibrated power supplies may be used. Contact support when changing power supplies. Use of power supplies coming from another source may cause damage not covered by the warranty. Warranty is canceled if power supplies (from a source other than support / designated by support) that are not correctly calibrated are used.

## 1.8.6. Technical data enclosures

## **ENCLOSURES - TECHNICAL DATA S**

Info	Explanation
Name	S

Info	Explanation
Enclosure class	IP 20
Measure	Height: 230 mm, width: 216 mm, depth: 85 mm.
Height units	•
Mounting	Wall
Ambient temperature	+ 5 ° C - + 40 ° C. For best battery life: + 15 ° C to + 25 ° C.
Environment	Environmental class 1, indoors. 20% ~ 90% relative humidity
Material	Powder coated sheet
Color	White
Cable entries, number	3
Batteries that fit	1 pc 12 V 2.3 Ah or
	2 pcs 12 V 2.3 Ah or
	1 pcs 12 V, 7.2 Ah.
Place for fan	No

## 1.8.7. Link to the latest information

Products and software are subject to updates, you will always find the latest information on our website.

#### PoE

1.8.8. Warranty, support, country of manufacture and country of origin

#### WARRANTY

The product has a two-year warranty, from the date of purchase (unless otherwise agreed). Support during the warranty period can be reached at support@milleteknik.se or telephone, +46 31-34 00 230. Compensation for travel and / or working hours in connection with locating faults, installing repaired or replaced goods is not included in the warranty. Contact Milleteknik for more information. Milleteknik provides support during the product's lifetime, however, no later than 10 years after the date of purchase. Switching to an equivalent product may occur if Milleteknik deems that repair is not possible. Support costs may (at Milleteknik's discretion) occour after the warranty period has expired.

#### SUPPORT

Do you need help with installation or connections? Our support phone is available: Monday-Thursday 08: 00-16: 00 and Fridays 08: 00-15: 00. Telephone support is closed between 11: 30-13: 15.

You will find answers to many questions at: www.milleteknik.se/support

Phone: +46 31-340 02 30

Support is open: Monday-Thursday 08:00-16:00, Fridays 08:00-15:00. Closed 11:30-13:15.

#### **SPARE PARTS**

Contacted support for questions about spare parts.

#### SUPPORT AFTER THE WARRANTY PERIOD

Milleteknik provides support during the life of the product, but no longer than 10 years after the date of purchase. Replacement for an equivalent product may occur if the manufacturer deems that repair is not possible. Costs for support and replacement are added after the warranty period has expired.

#### **QUESTIONS ABOUT PRODUCT PERFORMANCE?**

Contact sales: 46 31-340 02 30, e-mail: sales@milleteknik.se

### **COUNTRY OF MANUFACTURE**

Country of manufacture / country of origin is Sweden. For more information, contact your seller.

#### DESIGNED AND PRODUCED BY: MILLETEKNIK AB

Designed and produced by Milleteknik AB

#### 1.8.9. Batteries - recommended, not included

## 7.2 AH, 12 V AGM BATTERY

Fits in	Number of batteries
PoE injector 1p S	1

Battery type	v	Ah
Maintenance-free AGM, lead-acid battery.	12 V	7.2 Ah

#### Table 2. 10+ Design life \* battery

Article number	E-number	Article name	Terminal	Measure. Height width depth	Weight per piece	Make
MT113-12V07-01	5230536	UPLUS 12V 7.2Ah 10+ Design Life battery	Flat pin 6.3 mm	151 x 65 x 100 mm.	2.4 kg	UPLUS

\*Design life is the shelf life in years for an unused battery. Environmental factors such as heat and load affect the service life. Batteries that have a durability (+10 Design Life) of 10+ years usually need to be replaced after 5-6 years.

## 1.9. About translation of this document

User manual and other documents are in the original language in Swedish. Other languages are machine translated and not reviewed, errors may occur.

## 1.10. Product life cycle, environmental impact and recycling

The product is designed and constructed for a long service life, which reduces the environmental impact. The product's service life depends on, among other things, environmental factors, mainly ambient temperature, unforeseen load on components such as lightning strikes, external damage, handling errors, and more. Products are recycled by being handed over to the nearest recycling station or sent back to the manufacturer. Contact your distributor for more information. Costs that arise in connection with recycling are not reimbursed.



## 1.11. Address and contact details

Milleteknik AB



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