

# Battery backup ECO Small Series



The **ECO Small** is mainly used in smaller security systems where a simple and reliable power supply with battery backup function is needed.

The ECO Small offers **CONTROLLED CHARGING** which means that the batteries are never charged with more than 0,5A. This prevents the batteries from overcharging and extends their life significantly. The ECO Series can be used both with AGM batteries and Lithium LiFePO4 batteries.

#### Common applications:

- Small access control systems
- Code lock systems
- Smoke hatches
- Locking systems

Expected backup operating time at  
below conditions (new batteries):

@ Currency

System Voltage	Batteries	0,1A	0,3A	0,6A	1A	1,5A	2A
12V	1x 2,3Ah	12h	4h	2h	1h	40min	20min
12V	1x 7,2Ah	42h	19h	10h	5h	3h	2h
24V	2x 2,3Ah	12h	4h	2h	1h	40min	20min
24V	2x 4,5Ah	24h	8h	4h	2h	1,5h	40min

# Technical data

ECO 12V 3A S

ECO 24V 1,5A S

ECO 24V 3A S

## Recommended environment and the product's enclosure:

Recommended environment:	Environment Class 1, Inhouse, 20% ~ 90% relative humidity		
Ambient temperature:	+5 °C - 40 °C (For optimal battery life +15 °C - +25 °C)		
Protection class:	IP20		
Recommended mounting:	Wall		
Dimension (HxWxD):	230x216x85mm		
Net weight:	3kg	3kg	3kg
Number of cable penetrations:	3pcs		
The color of the enclosure:	White		
Built in fan for cooling:	No	No	No

## Electrical information:

Input voltage:	110V-264VAC/47-63Hz		
Output voltage:	13,6VDC	27,3VDC	
Max current:	3A	1,5A	3A
Charge current:	0,5A	0,5A	0,5A
Rated power:	75W	40W	75W
Overload:	105-135% rated output power		
Ripple at normal mode:	150mVp-p	150mVp-p	150mVp-p
Efficiency:	88,5%	88,5%	88,5%
Heat generation at 50% / 80% of rated power:	3W / 4W	3W / 5W	5W / 9W
Input current:	1,2A	1,2A	1,2A
Number of fused outputs:	1 pcs		
Type of fuse output:	1xF3A (glass)	1xF1,5A (glass)	1xF3A (glass)
Deep-discharge protection occurs at:	10,5V	21V	
Possible to connect in parallel:	YES		
Protection against:	Overload, Overvoltage, Overtemperature, Short circuit and Deep discharge		
Alarm functions (1 output):	Delayed Power failure (26,5V), low battery voltage (24V), disconnected batteries at startup & load fuse failure		
Alarm through:	Alternating relay		

## Article information:

Article name:	ECO 12V 3A S	ECO 24V 1,5A S	ECO 24V 3A S
Article number:	SM01C10112P030	SM01C10124P015	SM01C10124P030
E-number:			
The product meets:	EMC Directive 2014/30EU, Low Voltage directive: 2014/35/EU CE directive according to 765/2008, Emission: EN61000-6--2001, EN55022:1998-A1:2000, A2:2003 Class B, EN61000-3-2:2001. Immunity: EN61000-6-2:2005, EN61000-4-2, -3, 4, -5, -6, -11.		
Warranty period:	2 years		
Designed and produced by:	Milleteknik AB		
Country of origin:	Sweden		

## Information and choice of battery / batteries:

Designated battery type:	12V Maintenance-free batteries, type AGM or Lithium LiFePO4		
Possible battery types:	1x 2,3Ah or 1x 7Ah	2x 2,3Ah or 2x 4,5Ah	
Recommended batteries:	UPLUS 10+ Design Life 7,2Ah batteries		UPLUS 6+ Design Life 4,5Ah batteries
Article number batteries:	MT113-12V07-01		MT113-12V04-01

Article variants:	Article number:	Article information:	Minimum order quantity:	Full pallet:
ECO 12V 3A S-230V	SM01C10112P030A24	ECO 12V 3A S incl. 230V powercord & tamper switch	12pcs (half pallet)	40 pcs
ECO 12V 3A S/7Ah	SM01C10112P030B70	ECO 12V 3A S incl. 1x 7Ah 3+ Design Life batteries	12pcs (half pallet)	40 pcs
ECO 12V 3A S/7Ah-230V	SM01C10112P030B70A24	ECO 12V 3A S incl. 1x 7Ah 3+ Design Life batteries, 230V powercord & tamper switch	12pcs (half pallet)	40 pcs
ECO 24V 1,5A S-230V	SM01C10124P015A24	ECO 24V 1,5A S incl. 230V powercord & tamper switch	12pcs (half pallet)	40 pcs
ECO 24V 1,5A S/2,3Ah	SM01C10124P015B02	ECO 24V 1,5A S incl. 2x 2,3Ah 6+ Design Life batteries	12pcs (half pallet)	40 pcs
ECO 24V 1,5A S/2,3Ah-230V	SM01C10124P015B02A24	ECO 24V 1,5A S incl. 2x 2,3Ah 6+ Design Life batteries, 230V powercord & tamper switch	12pcs (half pallet)	40 pcs
ECO 24V 3A S-230V	SM01C10124P030A24	ECO 24V 3A S incl. 230V powercord & tamper switch	12pcs (half pallet)	40 pcs
ECO 24V 3A S/4,5Ah	SM01C10124P030B04	ECO 24V 3A S incl. 2x 4,5Ah 6+ Design Life batteries	12pcs (half pallet)	40 pcs
ECO 24V 3A S/4,5Ah-2320V	SM01C10124P030B04A24	ECO 24V 3A S incl. 2x 4,5Ah 6+ Design Life batteries, 230V powercord & tamper switch	12pcs (half pallet)	40 pcs

Version: CEO3\_V2