

# Battery backup ECO Medium Series



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

The ECO Medium offers **CONTROLLED CHARGING** which means that the batteries are never charged with more than 1A. 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.

The ECO Medium can be supplemented with a battery box if needed. The battery box is placed underneath the battery backup and are connected through a quick connect cable. The battery box have space for up to 4x 14Ah batteries per each battery box.

## Common applications:

- Medium size access control systems
- Code lock systems
- Smoke hatches
- Locking systems

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

@ Current

System Voltage	Batteries	0,5A	1A	2A	4A	6A	8A
12V	2x 7,2Ah	24h	12h	5h	2h	1h	30min
12V	2x 14Ah	48h	24h	10h	4h	2h	1,5h
24V	2x 7,2Ah	12h	5h	2h	1h	30min	15min
24V	2x 14Ah	24h	12h	5h	2h	1h	45min
24V	6x 14Ah (42Ah)	(with 1x battery box)		72h	38h	20h	9h 5h 3,5h

# Technical data

ECO 12V 5A M

ECO 12V 10A M

ECO 24V 3A M

ECO 24V 5A M

ECO 24V 10A M

## 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):	242x350x150mm				
Net weight:	4kg	5kg	4kg	5kg	7kg
Number of cable penetrations:	3pcs				6 pcs
The color of the enclosure:	White				
Built in fan for cooling:	No	No	No	No	Yes

## Electrical information:

Input voltage:	110V-264VAC/47-63Hz				
Output voltage:	13,6VDC		27,3VDC		
Max current:	5A	10A	3A	5A	10A
Charge current:	1A	1A	1A	1A	1A
Rated power:	75W	150W	75W	156W	240W
Overload:	105-135% rated output power				
Ripple at normal mode:	120mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
Efficiency:	86%	87,5%	88,5%	89%	89%
Heat generation at 50% / 80% of rated power:	6W / 9W	10W / 16W	5W / 9W	8W / 13W	17W / 27W
Input current:	1,2A	1,7A	1,2A	1,7A	2A
Number of fused outputs:	1 pcs				
Type of fuse output:	1xF5A (glass)	1xF10A (glass)	1xF3A (glass)	1xF5A (glass)	1xF10A (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 of batteries				
Alarm functions (1 output):	Delayed Power failure (26,5V) or low battery voltage (24V)				
Alarm through:	Alternating relay				

## Article information:

Article name:	ECO 12V 5A M	ECO 12V 10A M	ECO 24V 3A M	ECO 24V 5A M	ECO 24V 10A M
Article number:	ME01C10012P050	ME01C10012P100	ME01C10024P030	ME01C10024P050	ME01C10024P100
E-number:	5213518	5213519	5213520	5213521	5213522
The product meets:	EMC Directive 2014/30EU, Low Voltage directive: 2014/35/EU CE directive according to 765/2008, Emission: EN61000-6-2:2001, 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:	2x 7Ah or 2x 14Ah				
Recommended batteries:	UPLUS 10+ Design Life 14Ah batteries				
Article number 7,2Ah batteries:	MT113-12V07-01				
Article number 14Ah batteries:	MT113-12V14-01				

Article variants:	Article number:	Article information:	Minimum order quantity:	Full pallet:
ECO 12V 5A M-230V	ME01C10012P050A231	ECO 12V 5A M incl. 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 12V 10A M-230V	ME01C10012P100A231	ECO 12V 10A M incl. 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 3A M-230V	ME01C10024P030A31	ECO 24V 3A M incl. 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 3A M/7Ah	ME01C10024P030B70	ECO 24V 3A M incl. 2x 7Ah 3+ Design Life batteries	12 pcs (half pallet)	40 pcs
ECO 24V 3A M/7Ah-230V	ME01C10024P030B70A24	ECO 24V 3A M incl. 2x 7Ah 3+ Design Life batteries, 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 5A M-230V	ME01C10024P050A231	ECO 24V 5A M incl. 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 5A M/7Ah	ME01C10024P050B70	ECO 24V 5A M incl. 2x 7Ah 3+ Design Life batteries	12 pcs (half pallet)	40 pcs
ECO 24V 5A M/7Ah-230V	ME01C10024P050B70A24	ECO 24V 5A M incl. 2x 7Ah 3+ Design Life batteries, 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 5A M/14Ah	ME01C10024P050B14	ECO 24V 5A M incl. 2x 14Ah 10+ Design Life batteries	12 pcs (half pallet)	40 pcs
ECO 24V 5A M/14Ah-230V	ME01C10024P050B14A24	ECO 24V 5A M incl. 2x 14Ah 10+ Design Life batteries, 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 10A M-230V	ME01C10024P100A231	ECO 24V 10A M incl. 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs
ECO 24V 10A M/14Ah	ME01C10024P100B14	ECO 24V 10A M incl. 2x 14Ah 10+ Design Life batteries	12 pcs (half pallet)	40 pcs
ECO 24V 10A M/14Ah-230V	ME01C10024P100B14A24	ECO 24V 10A M incl. 2x 14Ah 10+ Design Life batteries, 230V powercord & tamper switch	12 pcs (half pallet)	40 pcs