

# BAT12Wh (Li-Ion)



Maintenance free Li-Ion technology  
 Hi-Tech Power Boost for Out: 12 or 24 V 12Wh  
 Protection: Over-current, Over-voltage, Over-charge, Deep-discharge, Short circuit  
 Balance Cell Function  
 High reliability : Long-life battery pack  
 Auto Testing for the battery State  
 ADELSYSTEM "CAN" connection  
 Manual Power Off Switch  
 Multicolor Indicator  
 IP20, Din Rail and Wall Mount

## Feature

Battery Bank for DC-UPS "All In One". Lithium-ion technology, maintenance-free. For 12V or 24V field. Simple connection with screw terminals for Wall mount or DIN rail. The device integrates CAN protocol communication to transfer and receive all data in ADELSYSTEM field.

## Technical Data

Nominal Input Voltage	12 or 24 VDC
Automatic determination of input voltage	At first power-up
Max Charging Voltage	28 Vdc
Internal Protection Fuse	7.5 A
External Protection Fuse (recommended)	10 A
Output Short Circuit and Overload	Automatic Protection
Communication	CANopen

## Battery

Battery Type	2 cells Li-Ion, 2 Ah
Battery Voltage	3.7 Vdc
Energy	12Wh
Life Cycle	1500 charge cycles (50°C)
Typical Charging Time (recover to 90% capacity)	30 min
Battery Protection	Deep Discharge, Over-charge, Short Circuit protection

## 12V system "DC Output"

Output Voltage	12 Vdc $\pm$ 5%
Max. Power	72 W

## 12V system "Charging Data"

End-of-charge	35 mA
Absorption charging current (Max.)	0.3 A

## 12V system "Discharging Data"

Battery disconnection from CBI	< 11 VDC
Nominal Discharging current	5 A
Max. permissible Discharging current	6 A
Self-discharge rate at 20 °C	35uA (typ) 1.5% x month

## 24V system "DC Output"

Output Voltage	24 Vdc $\pm$ 5%
Max. Power	72 W

## 24V system "Charging Data"

End-of-charge	35 mA
Absorption charging current (Max.)	0.3 A

## 24V system "Discharging Data"

Battery disconnection from CBI	< 23 VDC
Nominal Discharging current	2.5 A
Max. permissible Discharging current	3 A
Self-discharge rate at 20 °C	35uA (typ) 1.5% x month

## Indicators and Command

LED Charge ON	Battery Charging
LED Charge OFF	Not Charging
LED Battery State ON "Green"	Batt. Capacity > 90%
LED Battery State Constant Flashing "Green"	Battery Charging
LED Battery State OFF	Low Battery
LED Battery State "Red"	Fault
Push Button to turn ON and OFF the Battery Bank	Press for 1 sec. Release the button

## General Data

Protection Degree (EN/IEC 60529)	IP 20
Protection Class	III
Screw type terminals:	0.2 - 2.5 mm <sup>2</sup> (24 - 12
Torque:	AWG) 0.6 - 0.8 Nm

Dimension (WxHxD) DIN 43880	54 x 90 x 55 mm
Surge Protection	1.5 KV
Weight	0.4 kg
DIN Rail	Yes
Wall mount	Yes

## Data and Communications

Remote monitoring data:	AUX1
Protocol:	ADELSYSTEM (CAN)

## Climatic Data

Operating ambient temperature	-30 ... 55 °C
Recommended storage temperature	25 °C $\pm$ 5%
Recommended storage charge level	80 %
Humidity at 25 °C, no condensation	95 %

## Norms and certifications

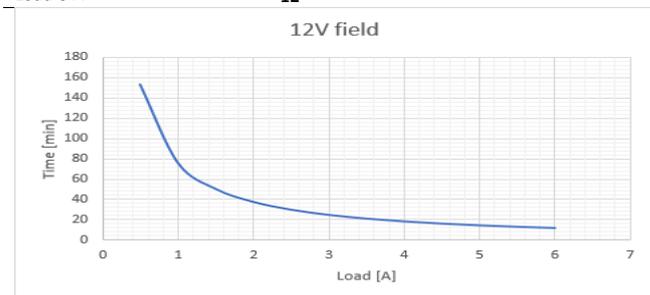
CE marking according to EMC Directive 2014/30/UE and Low Voltage Directive 2014/35/UE.

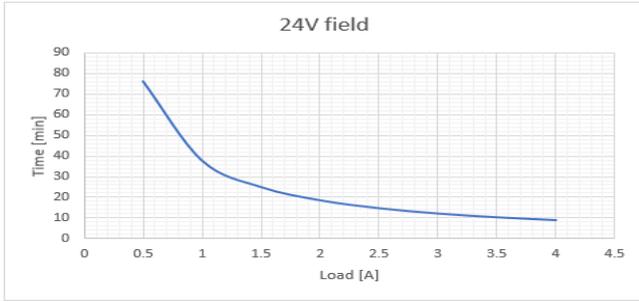
## Electrical Safety

In compliance with UL508, EN IEC 61010-2-201:2018  
 According to EN 60950-1/VDE 0805 (SELV) and EN 50178/VDE 0160 (PELV).  
 EN IEC 62368-1: 2014/AC:2015

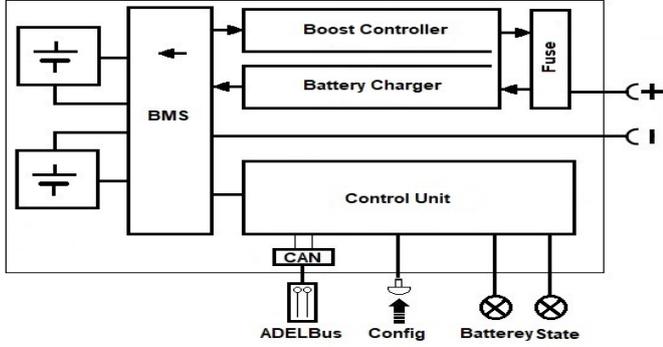
## Buffering time

Load	Minutes (12V)	Minutes (24V)
Load 0.5 A	154	58
Load 1 A	76	31
Load 1.5 A	51	20
Load 2 A	38	15
Load 2.5 A	30	12
Load 3 A	25	10
Load 3.5 A	21	-
Load 4 A	18	-
Load 4.5 A	16	-
Load 5 A	15	-
Load 5.5 A	13	-
Load 6 A	12	-





**Electrical Diagram**



**Mounting instruction**

