

# BAT500J Super Cap



- Maintenance free Super Capacitor technology
- Hi-Tech Power Boost for Out: 12 or 24 V 500J
- Protection: Over-current, Over-voltage, Over-charge, Deep-discharge, Short circuit
- High reliability: 500.000 charging cycle
- Auto Testing for the capacity State
- Large temperature Range
- ADELBus "CAN" connection
- Manual Power Off Button
- Multicolor Indicator
- IP20, Din Rail and Wall Mount, Compact design

## Feature

Battery Bank for DC-UPS "All In One". Super Cap 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 over ADELBus.

## Technical Data

Nominal Input Voltage	12 or 24 VDC
Automatic determination of input voltage	At first power-up
Rated Charging Voltage at 12 Vdc	> 0.5V the Power supply Voltage
Rated Charging Voltage at 24 Vdc	> 1V the Power supply Voltage
Efficiency	>96%
Charging Current Max	350 mA
Internal Protection Fuse	8 A
External Protection Fuse (recommended)	6 A
Output Short Circuit and Overload	Automatic Protection
Communication	ADELBus (CAN open)
Power Consumption	70 W
Internal Consumption in Buffer Mode	0.05 W

## Capacity

Capacitor Type	EDLC
Energy	500 J
Life Cycle	500.000 charge cycles (50°C)
Typical Charging Time (recover to 90% capacity)	120 sec. max
First charging time from warehouse	25 min max
Device Protection	Over-Charge, Short Circuit, Balancer.

## 12V system "DC Output"

Output Voltage	12 Vdc ± 5%
Max. Power	72 W

## 12V system "Charging Data"

End-of-charge	35 mA
Absorption charging current (Max.)	0.6 A

## 12V system "Discharging Data"

Nominal Discharging current	5 A
Max. permissible Discharging current	6 A

## 24V system "DC Output"

Output Voltage	24 Vdc ± 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"

Nominal Discharging current	2.5 A
Max. permissible Discharging current	3 A

## Indicators LED and Command

STATUS	BACKUP STATE
Capacity full	LED Green ON
Capacity > 90%	LED Green ON
Not Charging	LED OFF
In Charging	LED Green Flashing
Low Capacity	LED OFF
Fault	LED Red ON

## ADELBus

STATUS	ADELBus
CAN Active	LED Green ON or Flashing
Awaiting configuration	RED / GREEN Flashing
CAN bus Error	LED Red ON

## Command

Push Button to turn ON and OFF the Battery Bank	Press for 1 sec. Release the button
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## 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 AWG) 0.6 - 0.8 Nm
Torque:	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:	ADELBus (CAN)

## Climatic Data

Operating ambient temperature	-30 ... 60 °C
Recommended storage temperature	25 °C ± 5%
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	Sec. (12V)	Sec. (24V)
Load 0.5 A	70	36
Load 1 A	40	18
Load 1.5 A	36	14
Load 2 A	24	10
Load 2.5 A	18	8

## Mounting instruction

DIN Rail Mount and Wall Mount

