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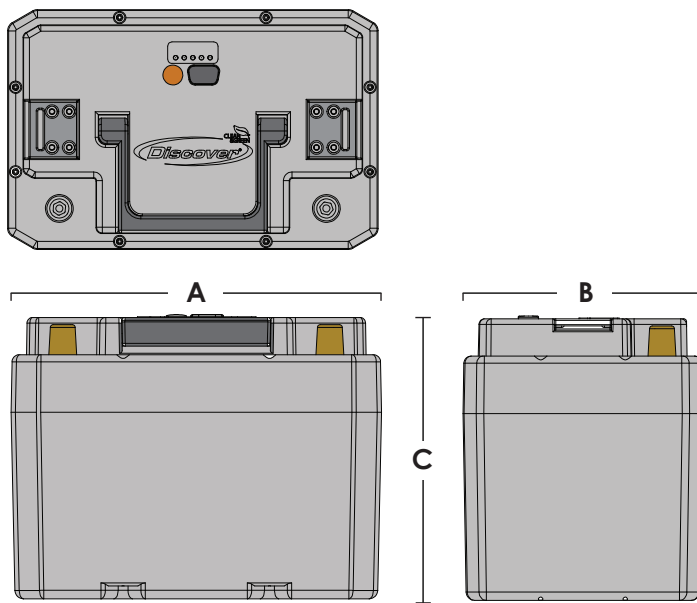
DATA SHEET



24V 1.0 kWh Advanced Energy System (AES)

Discover Advanced Energy Systems allow for equipment design and functionality improvements and deliver productivity gains through enhanced cycling, charge time and weight reductions in stationary and mobile applications. Dramatic improvements in cycle life and charge efficiency combined with zero maintenance requirements provide the end user with significant cost of ownership savings.

Mechanical Drawings



Efficient & Fast Charging

- Charge efficiency > 95% at high charge rates. Increases productivity, reduces energy costs and eliminates the need for investments in battery change out systems.

Efficient and Stable Discharge

- Delivers > 95% of capacity at high uniform and stable voltages during discharge. Increases equipment performance and reduces motor fatigue.

Robust Safety

- Multiple levels of protection prevent operation outside of current, voltage, and temperature limits.

Weight Efficient

- Systems provide > 3 times the energy per weight of high quality lead acid.

Environmentally Safe

- Does not contain toxic metals such as cobalt, lead, cadmium, nor any corrosive acids or alkalis.

100% Recyclable

- End of Life recovery and licensed recycling through Discover's factory warehouse network.

Mechanical Specifications

Length (A)	258 mm	10.2 in
Width (B)	167 mm	6.6 in
Height (C)	198 mm	7.8 in
Weight	N/A	N/A
Cell Modules	8	
Terminal	AM6	
Terminal Torque	6NM +/-1NM	
Fuse Rating	N/A	
Case	PC/ABS	
IP Ratings	IP55	

BMS - Protection Level

Event	Warning		Fault	
High Temperature	N/A	N/A	60°C	140°F
Low Temperature	N/A	N/A	-20°C	-4°F
High Voltage	N/A		3.65 VPCM	
Low Voltage	N/A		2.70 VPCM	
Over Current	N/A		40 A	
Low SOC	8%		N/A	
BMS Type	Standard			

Electrical Specifications

Nominal Volts	24V	3.2V per cell module
Min Cut-off Voltage	21.6V	2.7V per cell module
Max Cut-off Voltage	29.2V	3.65V per cell module
Capacity (1C)	40 Ah	
Capacity (120h)	40 Ah	
Energy (1C)	1024 Wh	
Energy (120h)	1024 Wh	
Max Continuous Current	N/A	
3 Second Peak Current	N/A	

Cell Chemistry	LiFePO ₄	
Self-Discharge 25°C/77°F	3% per month (battery off)	
Operating Temperature	-20°C/-4°F	60°C/140°F

Constant Power - Minutes of Discharge			
1000 W	1800 W	2700 W	3600 W
61	-	-	-

Constant Current - Minutes of Discharge			
@25A	@56A	@100A	@150A
96	-	-	-

Certified Quality

Discover Energy Corp. and its facilities and products are certified to multiple standards and compliance including:

- ISO 9001, ISO 14001
- UL1973 (pending)
- IEC62133

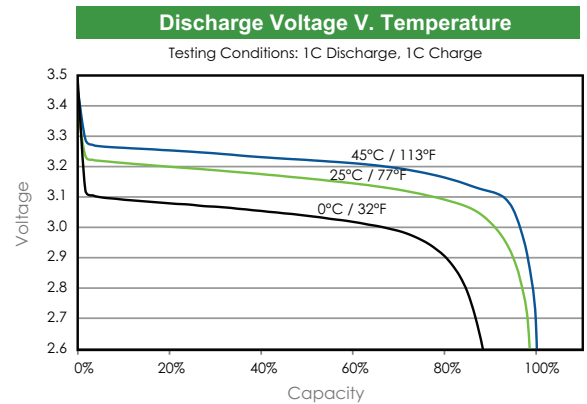
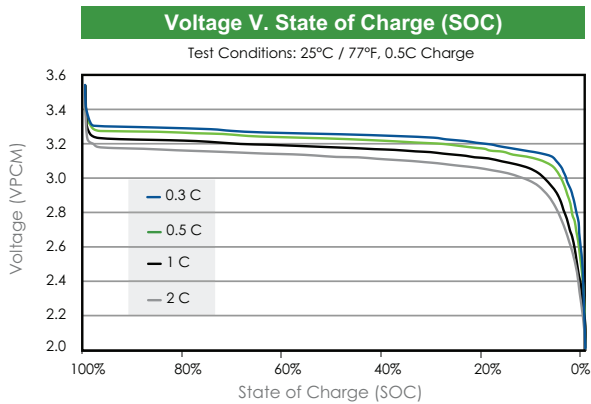
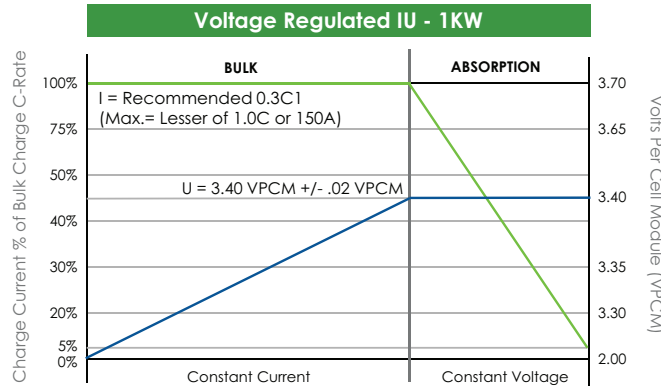


Contact Us



Suite 880-999 West Broadway
Vancouver, BC, V5Z 1K5, Canada
Tel: 604.730.2877
Email: info@discover-energy.com
www.discover-energy.com

Graphs



Communication and Data

Communication	
J1939 CAN (database available)	•
USB	•
LCD Display (remote mountable)	•
On/Off Switch (remote mountable)	•
RS232	•

Data logging	
Time Stamps	•
Faults/Warnings	•
I/V/T/Kwh History	•
State of Charge	•

Protection	
Over/Under Voltage	•
Over/Under Temperature	•
Over Current	•
Pre-Charge Control	•

POWER BEYOND YOUR EXPECTATIONS