42-48-6900

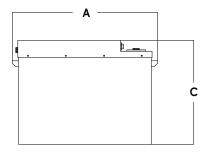
DATA SHEET

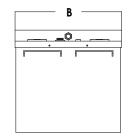


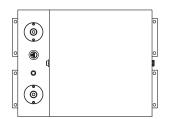
48V 6.9 kWh Advanced Energy System (AES)

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

















Mechanical Specifications			
Length (A)	461.5 mm 18.2 in		
Width (B)	338.5 mm	13.3 in	
Height (C)	375 mm 14.8 in		
Weight	79.8 kg 175.9 lbs		
Cell Modules	16		
Terminal	M8 Insert		
Terminal Torque	7.0-7.7 Nm 5.1-5.7 ft-lbs		
Fuse Rating	250 A		
Case	Steel		
IP Ratings	IP54		

BMS - Protection Level				
Event	Warning		Fault	
High Temperature	45°C	113°F	60°C	140°F
Low Temperature	5°C	41°F	0°C	32°F
High Voltage	3.55 VPCM		3.70 VPCM	
Low Voltage	2.90 VPCM		2.70 VPCM	
Over Current	125 A		150 A	
Low SOC	N/A		10%	
BMS Type	Advanced - XANBUS			

Electrical Specifications		
Nominal Volts	51.2V 3.2V per cell module	
Min Cut-off Voltage	44.8V 2.7V per cell module	
Max Cut-off Voltage	59.2V 3.7V per cell module	
Capacity (1C)	135 Ah	
Capacity (120h)	135 Ah	
Energy (1C)	6912 Wh	
Energy (120h)	6912 Wh	
Max Continuous Current	150 A	
3 Second Peak Current	300 A	

Cell Chemistry		PO ₄
Self-Discharge 25°C/77°F	3% per month (battery off)	
Operating Temperature	0°C/32°F	45°C/113°F

Constant Power - Minutes of Discharge			
1000 W	1800 W	2700 W	3600 W
415	230	154	115

Constant Current - Minutes of Discharge			
@25A	@56A	@100A	@150A
324	145	81	54

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.

Certified Quality

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

- ISO 9001, ISO 14001 UL2271 (pending)
- UL1973 (pending)
- UL2580 (pending)
- IEC62133
- UN38.3 (pending)
- JIS 8715-2 (pending)













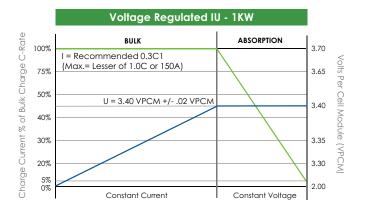


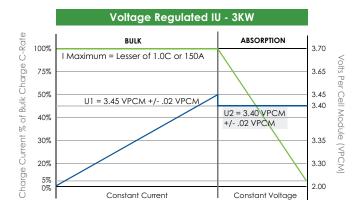


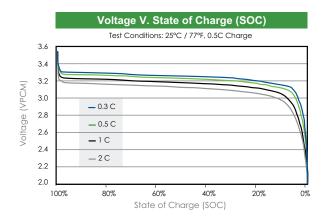
Suite 880-999 West Broadway Vancouver, BC, V5Z 1K5, Canada Tel: 604.730.2877 Email: info@discover-energy.com www.discover-energy.com

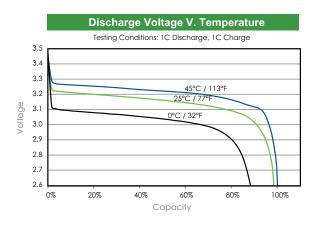


Graphs









Communication and Data

Data logging & Protection	
Time Stamps	•
Faults/Warnings	•
I/V/T/Kwh History	•
State of Charge	•
Over/Under Voltage	•
Over/Under Temperature	•
Over Current	•
Pre-Charge Control	•

Communication	
J1939 CAN (database available)	•
USB	•
LCD Display (remote mountable)	•
On/Off Switch (remote mountable)	•
R\$232	•
XANBUS Enabled	•

POWER BEYOND YOUR EXPECTATIONS