

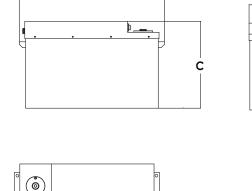
36V 3.8 kWh Advanced Energy System (AES)

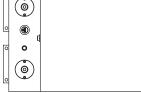
Discover Advanced Energy Systems allow for equipment design and functionality improvements and deliver productivity gains through enhanced cycling, charge time and weight reductions in stationary and mobile applications. Dramatic improvements in cycle life and charge efficiency combined with zero maintenance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

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Mechanical Drawings

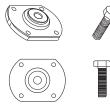




Mechanical Specifications			
Length (A)	461.5 mm 18.2 in		
Width (B)	338.5 mm	13.3 in	
Height (C)	276 mm 10.9 in		
Weight	51.0 kg 112.4 lbs		
Cell Modules	12		
Terminal	M8 Insert		
Terminal Torque	7.0-7.7 Nm 5.1-5.7 ft-lbs		
Fuse Rating	250 A		
Case	Steel		
IP Ratings	IP54		

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	3.0 VPCM		2.80 VPCM	
Over Current	125 A		150 A	
Low SOC	N/A		10%	
BMS Type	Advanced			

Terminal: M8 Insert



Electrical Specifications		
Nominal Volts	36V 3.2V per cell module	
Min Cut-off Voltage	33.6V 2.8V per cell module	
Max Cut-off Voltage	44.4V 3.7V per cell module	
Capacity (1C)*	100 Ah	
Capacity (120h)*	100 Ah	
Energy (1C)	3840 Wh	
Energy (120h)	3840 Wh	
Max Continuous Current	150 A	
3 Second Peak Current	300 A	
Cell Chemistry	LiFePO ₄	

Cell Chemistry	LIFEPO4	
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	
230	128	85	64	
Constant Current - Minutes of Discharge				
@25A	@56A	@100A	@150A	
240	107	40	40	

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) • UN38.3 (pending)
- IEC62133
- JIS 8715-2 (pending)







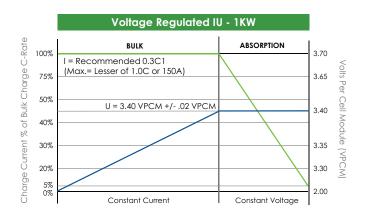
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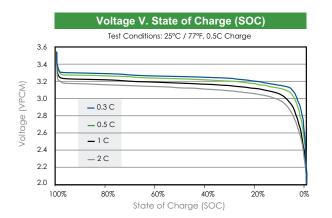
*Unlike lead acid, Discover AES do not suffer from the same "peukert affect" and will deliver 100% of the rated capacity at all recommended discharge rates.

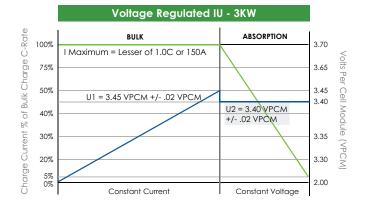
DATA SHEET

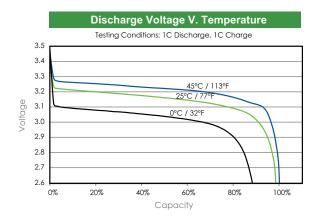


Graphs









Communication and Data

Communication	
J1939 CAN (database available)	•
USB	•
LCD Display (remote mountable)	•
On/Off Switch (remote mountable)	٠
RS232	•

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

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

POWER BEYOND YOUR EXPECTATIONS