



ENERGY ALTERNATIVES

Powered By Nature

EA-POWER-LVR-5.1

Lithium ESS Solution : Low Voltage Rack-mounted Power Supply



The extensive range of ENERGY ALTERNATIVES products and services solutions give you your business the power to succeed.

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EA-POWER-LVR-5.1 Lithium ESS Solution

The inverter converts the direct current (DC) of the LV Rack-mounted power supply to alternating current (AC) and distributes it to each component of an electronic device. The rack-mounted DC power supplies are stored in a rack. Holders stack many of these small yet strong power supplies in a single rack or use them as a stand-alone power source.



LITHIUM IRON PHOSPHATE BATTERY

Electrical Performance

ITEM		DETAIL
Nominal Voltage	V	51.2 V
Nominal Capacity	AH	100 AH
Capacity @20A	Min	300 Min
Energy	Wh	5120 Wh
Resistance		≤ 20 mΩ@ 50% SOC
SelfDischarge		< 3% / Month
Cells	v	LFP Cell 3.2 V

Mechanical Performance

ITEM		DETAIL
Dimension(L / W / H)	mm	430/ 442 / 135 mm
	Inch	16.93 / 17.4 / 5.31 Inch
Approx. Weight	kg	43 ±2 kg
Terminal Type		Quick Plug Type
Case Material		Metal
Enclosure Protection		IP20

Charge Performance

ITEM		DETAIL
Recommended ChargeCurrent	A	20 A 100 A
Maximum Charge Current	A	58.4 V > 56 V
Charge Cut-off Voltage	V	< 54.4 V
Reconnect Voltage	V	RS485 / CAN
Balancing Voltage	V	
Protocol (Optional)		

Temperature Performance

ITEM		DETAIL
Discharge Temperature	°C / °F	-20 ~ 60°C(-4 ~ 140°F)
Charge Temperature	°C / °F	0 ~ 45°C(32 ~ 113°F)
Storage Temperature	°C / °F	-5 ~ 35°C(23 ~ 95°F)
High Temperature Cut-off	°C / °F	65°C(149°F)
Reconnect Temperature	°C / °F	48°C(118°F)

Discharge Performance

ITEM		DETAIL
Continuous Discharge Current	A	50 A
Max Continuous Discharge Current	A	100 A
Peak Discharge Cut-off Current	A	300A (5 ~ 15ms)
Discharge Cut-off Voltage	V	40V
Reconnect Voltage	V	> 44.8 V
Short Circuit Protection		200 ~ 800 μs

Compliance

ITEM		DETAIL
Certifications		CE
		UN 38.3
		UL 1973 & IEC 62619
ShippingClassification		UN 3480, CLASS 9

Electrical Performance

High Cycle Life

> 6000 cycles @80% DOD for effectively lower total cost of ownership.

Longer Service Life

Low maintenance batteries with stable chemistry.
Easily monitor state of charge (SOC) of smart models.

Built-in Circuit Protection

Battery Management Systems (BMS) are incorporated against abuse.

Battery Storage

Up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.

Quick Recharge

Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.

Extreme Tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.

Extreme Heat Tolerance

Lithium batteries provide more Wh / kg while also being up to 1/3 the weight of its SLA equivalent.

Application

Lithium Iron Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries. Suitable applications include:

- IDC
- Base station
- Solar power station
- DPS
- Energy storage
- Remote Monitoring
- Microgrid energy storage
- Switching applications and more
- Caravan / Marine / Golf Car / Buggies

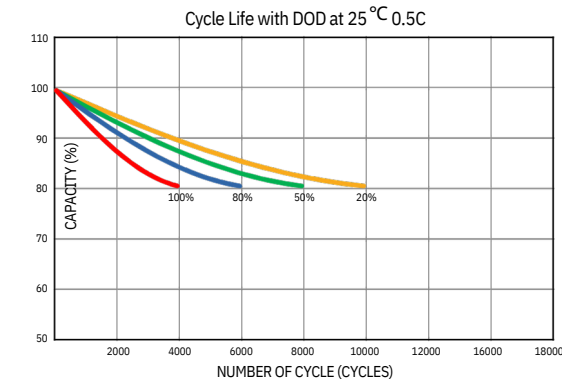
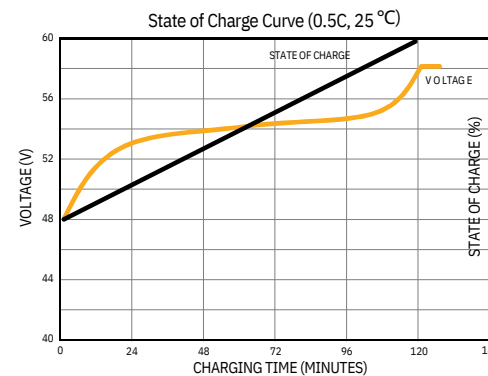
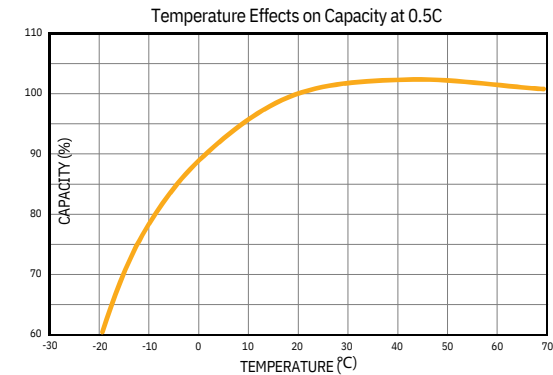
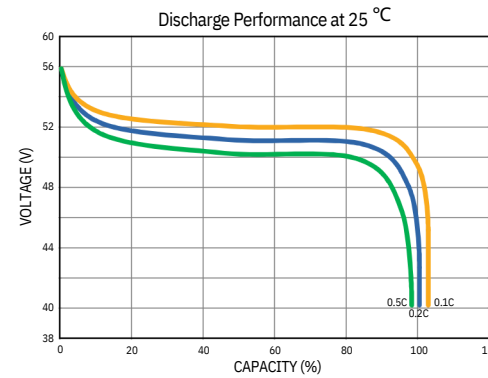
Cautions

- DO NOT short circuit, crush or disassemble • DO NOT heat or incinerate • DO NOT immerse in any liquid • Store at 50% capacity. Recharge every 3 months

The storage area should be clean, cool, dry and ventilated



PERFORMANCE CHARACTERISTICS



Performance may vary depending on application. All specifications are subject to change without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.