

LOOM SOLAR

48NPFC100



LITHIUM IRON PHOSPHATE BATTERY

Electrical Specification

Nominal Voltage	48V
Nominal Capacity	100Ah
Energy	4.8KWh
Resistance	$\leq 25 \pm 2m\Omega$
Efficiency	$\geq 90\%$
Current Limiter	Available
Maximum Modules in Parallel	8 (with CBMS)

Charge Specification

Recommended Charge Current	0.3C
Maximum Charge Current	1C
Charge Current 15 to 40°C	0.3C
Recommended Charge Voltage	54±0.5V
Operating Voltage	42-56V

Temperature Specification

Charge Temperature	0 to + 60°C
Discharge Temperature	-10 to + 60°C
Storage Temperature	0 to + 40°C
Humidity	5% to 95%

Dimensional Specification

Width (W)*Depth (D)* Height (H)	(439*400*222)±2mm
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Mechanical Specification

Dimensions (W*D*H)	(439*400*222)±2mm
Weight (approx.)	45Kg
Terminal Type	M8
Case Material	Metal
Enclosure Protection	IP20
Cell Type	Prismatic
Chemistry	LFP

Discharge Specification

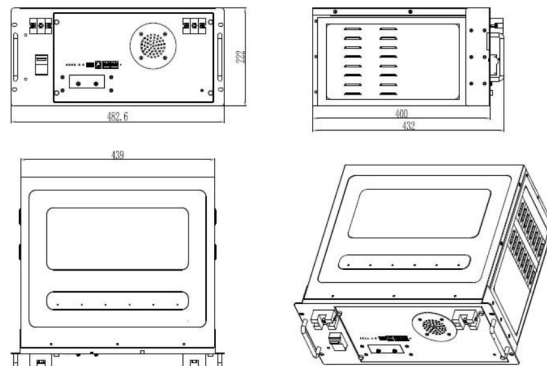
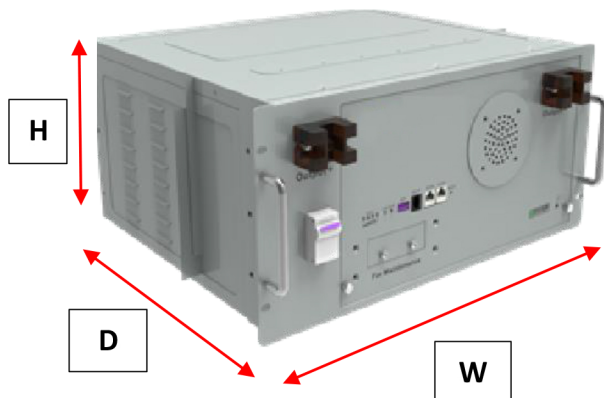
Recommended Discharge Current	0.3C
Maximum Discharge Current	1C
Recommended Low Voltage Disconnect	42V
Discharge Current 15 to 40°C	0.3C
Operating Voltage	42-56V

Compliance Specification

Certification	Yes
Shipping Classification	Yes

Front Panel Specification

Status Indicators	SOC/ALM/RUN
Communication Ports	RS485*2,RS232*1
Reset Key	Available
On/Off Switch	Available
LED Interface	Available



Key Specification

High Safety Ensured by integrated Smart BMS

High Energy Density by Adopting LFP cells

Extendable capacity through parallel connection

Wide working Temperature range

Perfectly Fits in Telecom standard 19" cabinet

Performance Specification

Long Cycle Life: 3000 cycles @ 80% DOD, 25°C discharge conditions

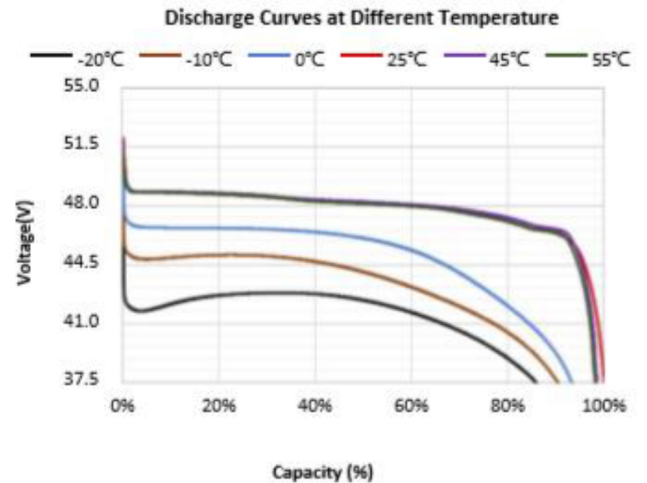
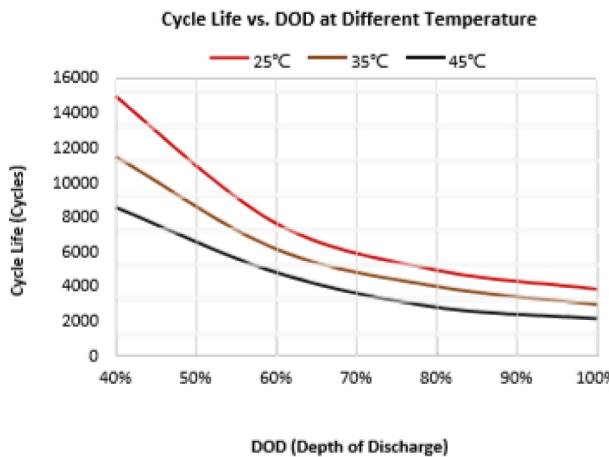
Stable structure of LFP crystal with high decompose temperature

Higher Cost Effectiveness than other Li-ion chemistries

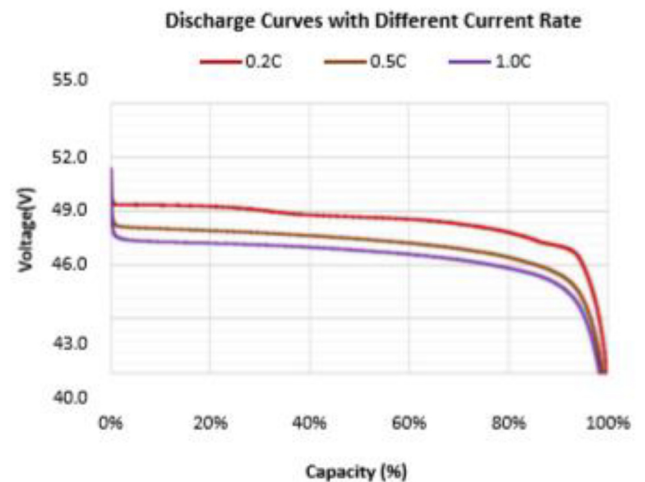
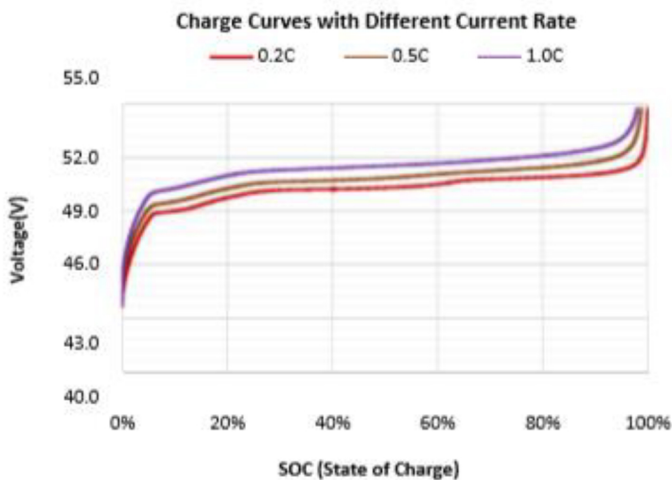
High Discharge/Charge Efficiency: More Than 90%.

Easy handling and installation

Charging Discharging Curves at different C-rates



Performance curves



Standard compliance

UN38.3

