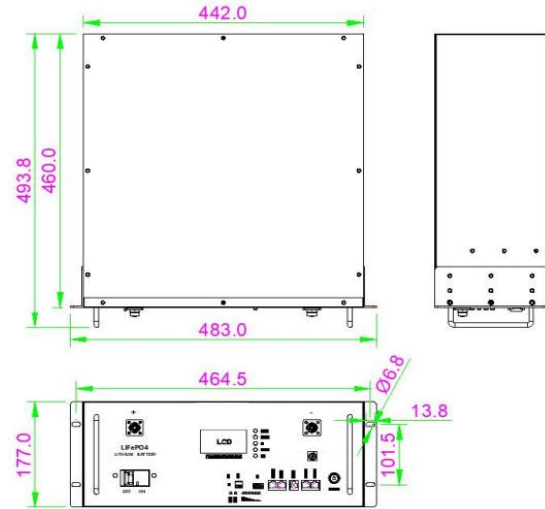


LITHIUM IRON PHOSPHATE BATTERY—HL-LR48100

OUTLINE DIMENSION



L mm(")	W mm(")	H mm(")
460 (18.11)	442 (17.4)	177 (6.97)

ELECTRICAL PERFORMANCE

Nominal Voltage	48 V
Nominal Capacity	100Ah
Energy	4800Wh
Communication	CAN/RS232/RS485
Resistance	≤45 mΩ @ 50% SOC
Efficiency	>96%
Module Parallel	Up to 15 packs

CHARGE PERFORMANCE

Recommended Charge Current	30A
Maximum Charge Current	100A
Recommended Charge Voltage	54V
BMS Charge Cut-Off Voltage	54.75 V (3.65V/Cell)
Reconnect Voltage	>50.25 V (3.35V/Cell)
Balancing Starting Voltage	3.4V/Cell

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	110 A (1s)
BMS Discharge Cut-Off Current	150 A (100ms)
Recommended Low Voltage Disconnect	45V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	40.5V (1s) (2.7V/Cell)
Reconnect Voltage	>45 V (3V/Cell)
Short Circuit Protection	<350 μs

MECHANICAL PERFORMANCE

Dimension (L x W x H)	460 x 442 x 177 mm 18.11 x 17.4 x 6.97"
Approx. Weight	100 lbs(45Kg)
Terminal Type	Quick connector
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	SPCC
Enclosure Protection	IP21

TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	-4 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

COMPLIANCE

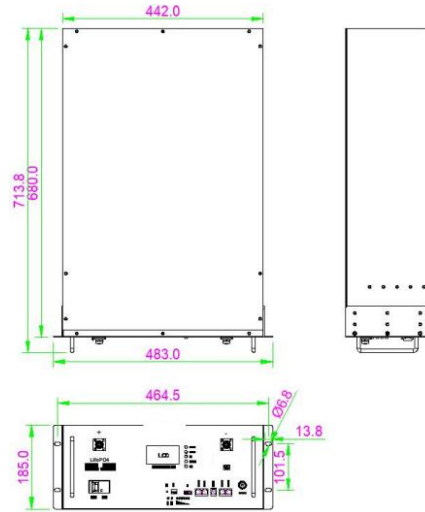
Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 38.3, MSDS, CLASS 9

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.

LITHIUM IRON PHOSPHATE BATTERY—HL-LR48200



OUTLINE DIMENSION



L mm(")	W mm(")	H mm(")
680 (18.11)	442 (17.4)	185 (7.28)

ELECTRICAL PERFORMANCE

Nominal Voltage	48 V
Nominal Capacity	200Ah
Energy	9600Wh
Communication	CAN/RS232/RS485
Resistance	≤50 mΩ @ 50% SOC
Efficiency	>96%
Module Parallel	Up to 15packs

MECHANICAL PERFORMANCE

Dimension (L x W x H)	680 x 442 x 185 mm 26.77 x 17.4 x 7.28"
Approx. Weight	202.4lbs(88Kg)
Terminal Type	Quick connector
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	SPCC
Enclosure Protection	IP21

CHARGE PERFORMANCE

Recommended Charge Current	50A
Maximum Charge Current	100A
Recommended Charge Voltage	54V
BMS Charge Cut-Off Voltage	<54.75 V (3.65V/Cell)
Reconnect Voltage	>50.25 V (3.35V/Cell)
Balancing Starting Voltage	3.4V/Cell

TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	-4 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	110 A (1s)
BMS Discharge Cut-Off Current	150 A (100ms)
Recommended Low Voltage Disconnect	45 V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	40.5V (1s) (2.7V/Cell)
Reconnect Voltage	>45 V (3V/Cell)
Short Circuit Protection	<350 μs

COMPLIANCE

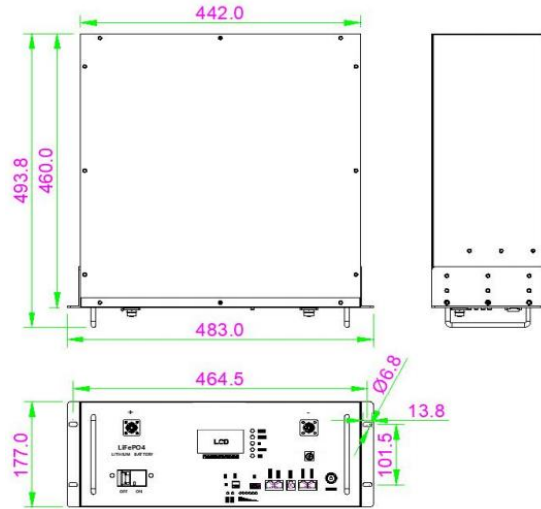
Certifications	CE (battery) UN38.3 (battery)
Shipping Classification	UN 3480, CLASS 9

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LITHIUM IRON PHOSPHATE BATTERY—HL-LR512100



OUTLINE DIMENSION



L mm(°)	W mm(°)	H mm(°)
460 (18.11)	442 (17.4)	177 (6.97)

ELECTRICAL PERFORMANCE

Nominal Voltage	51.2 V
Nominal Capacity	100Ah
Energy	5120Wh
Communication	CAN/RS232/RS485
Resistance	≤60 mΩ @ 50% SOC
Efficiency	>96%
Module Parallel	Up to 15packs

MECHANICAL PERFORMANCE

Dimension (L x W x H)	460 x 442 x 177 mm 18.11 x 17.4 x 6.97"
Approx. Weight	99lbs(45Kg)
Terminal Type	Quick connector
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	SPCC
Enclosure Protection	IP21

CHARGE PERFORMANCE

Recommended Charge Current	30A
Maximum Charge Current	100A
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	<58.4 V (3.65V/Cell)
Reconnect Voltage	>57.6 V (53.6V/Cell)
Balancing Starting Voltage	3.4V/Cell

TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	-4 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	110 A (1s)
BMS Discharge Cut-Off Current	150 A (100ms)
Recommended Low Voltage Disconnect	48 V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (1s) (2.7V/Cell)
Reconnect Voltage	>48 V (3V/Cell)
Short Circuit Protection	<350 μs

COMPLIANCE

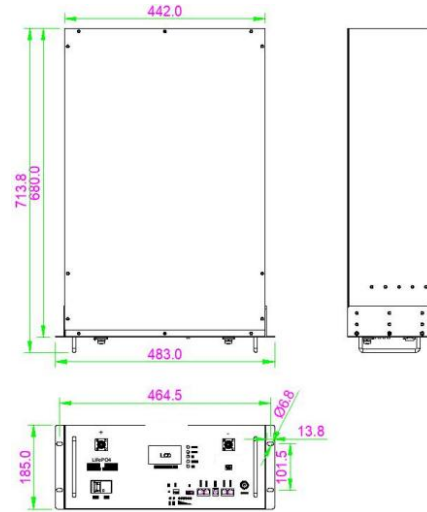
Certifications	CE (battery) UN38.3 (battery)
Shipping Classification	UN 3480, CLASS 9

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LITHIUM IRON PHOSPHATE BATTERY—HL-LR512200



OUTLINE DIMENSION



L mm(")	W mm(")	H mm(")
680 (18.11)	442 (17.4)	185 (7.28)

ELECTRICAL PERFORMANCE

Nominal Voltage	51.2 V
Nominal Capacity	200Ah
Energy	10240Wh
Communication	CAN/RS232/RS485
Resistance	≤50 mΩ @ 50% SOC
Efficiency	>96%
Module Parallel	Up to 15packs

MECHANICAL PERFORMANCE

Dimension (L x W x H)	680 x 442 x 185 mm 26.77 x 17.4 x 7.28"
Approx. Weight	202.4lbs(92Kg)
Terminal Type	Quick connector
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	SPCC
Enclosure Protection	IP21

CHARGE PERFORMANCE

Recommended Charge Current	50A
Maximum Charge Current	100A
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	<58.4 V (3.65V/Cell)
Reconnect Voltage	>57.6 V (53.6V/Cell)
Balancing Starting Voltage	3.4V/Cell

TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	-4 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	110 A (1s)
BMS Discharge Cut-Off Current	150 A (100ms)
Recommended Low Voltage Disconnect	48 V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (1s) (2.7V/Cell)
Reconnect Voltage	>48 V (3V/Cell)
Short Circuit Protection	<350 μs

COMPLIANCE

Certifications	CE (battery) UN38.3 (battery)
Shipping Classification	UN 3480, CLASS 9

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