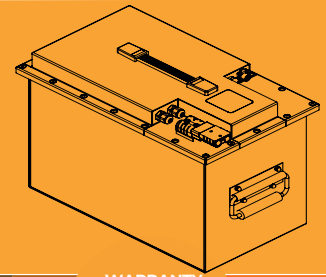


LFP CHEMISTRY LITHIUM BATTERY

DATA SHEET

NE 3W 5150AL



WARRANTY
36
MONTHS

GENERAL CHARACTERISTICS

Nominal Voltage (V)	51.2
Capacity (Ah)	50
No. of cell in series	16
No. of cell in parallel	1
Total No. of cell	16
Cell Type	Prismatic 50Ah (REPT)
Chemistry	LFP

ELECTRICAL CHARACTERISTICS

Maximum cut-off voltage (V)	58.4 (-1.6)
Minimum cut-off voltage (V)	44.8(+1.6)
Charging Voltage (V)	58.0
Charging Mode	CC-CV
Recommended charging current (A)	16.0
Maximum charging current (A)	25.0
Maximum continuous discharging current (A)	50.0
Peak discharging current (A)	70.0
Cell over voltage Protection	3.65
Cell over voltage release	3.55
Cell under voltage Protection	2.8
Cell under voltage release	2.9

PROTECTIONS

Cell under voltage protection	Yes
Cell over voltage Protection	Yes
Over current protection	Yes
Short circuit protection	Yes
Temperature protection	Yes

OTHER

Dimension (WxDxH)	(400x240x300) mm
Weight	28kg (Approx)
Power Connector for Charging and Discharging	Anderson SB-50
Communication Connector	CNLINKO LP-12 (8PIN)
Pressure Vent	Yes
Baud Rate	250kbps

Communication Pin Signal Details for CNLINKO LP 12(8Pin)

Connector Pin No.	BMS Communication Pin	Signal Detail	Remarks
1	CAN H	Discharge/Charge	Vehicle / Charge CAN communication
2	CAN L		
3	SW (K+)	Ignition	Key On Function
4	SW (K-)		
5	RS485 A	Debug	To Debug Or Update
6	RS485 B		
7	Buzzer Positive	Audio Visual Alarm	
8	Buzzer Negative		

CELL SPECIFICATION
General Characteristics

No.	Parameter	Specification	Remarks
1	Typical capacity	≥ 50 Ah	At 1C Discharge Current
2	Operating Voltage (V)	2.50 - 3.65 V	
3	Impedance (1Khz)	≤0.6 mΩ	AC Internal Resistance
4	Shipping Capacity	≤50 % SOC	
5	Weight	1.18 Kg	
6	Self-Discharge	≤ 3.5 % per month	

BMS PARAMETER

Feature	Test Items	Specification			Unit
		Min	Typical	Max	
Operating Voltage	Voltage Range	44.8		58.4	V
Operating Current (continuous)	Charge Current			25.0	A
	Discharge Current			50.0	A
Charge Protection	Charger Voltage (CC-CV)		58.0		V
	Overcharge protection voltage		3.65		V
	Overcharge protection delay time		1		S
	Overcharge protection recovery voltage		3.55		V
Discharge Protection	Over discharge protection voltage		2.8		V
	Over discharge protection delay time		1		S
	Over discharge protection recovery voltage		2.9		V
Equalization function	Equalization turn-on voltage		3.40		V
	Equalization current		50		mA
Temperature(built-in)	Temperature protection value for charge			55	°C
	Temperature protection release value for charge			50	°C
	Temperature protection value for discharge			65	°C
	Temperature protection release value for discharge			55	°C
Internal resistance	Discharge circuit internal resistance	/	5	20	mΩ
Self-consumption	Operating mode	/	50	100	uA
Operating temperature	Normal working range	0		55	°C
Storage temperature	Humidity below 90%	0		45	°C

BMS FEATURES

BMS provides complete management and protection for the battery.

Voltage, Current, Temperature warning and protection.

Maximum operating current can be customized.

Short protection function.

Balance function. Control and balance the voltage between cells during charging and idle.

It can be connected to the display screen to display the SOC and various working conditions of the battery.

Communication function (Bluetooth, CAN, RS485)

Connect to computer through PC BMS software and dedicated cable.

PC BMS software could realize: Monitor all parameters of battery Monitor battery status, alarms, protection, errors.

WARNING

During their use, the batteries should be kept away from heat sources and high voltages.

Do not dismantle or assemble the batteries by yourself.

Do not heat and burn of the batteries and throw them in fire.

Damping of the battery is prohibited.

Avoid charging battery near a fire source or in direct sunlight.

The battery should not be damaged by means of methods like knocking metallic things into the battery, hammering the battery, knocking it violent or etc.

Welding is not allowed to be conducted on the battery.

Do not directly contact with the leaking battery.

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