

LITHIUM IRON PHOSPHATE BATTERY



Lifos 105 (v2) Technical Data Sheet

ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	105Ah
Energy	1344Wh
Resistance	≤15mΩ
Efficiency	≥90%
Self Discharge	≤3% per month
Maximum Batteries in Series (see table page 3)	4PCS
Maximum Batteries in Parallel (see table page 3)	4PCS

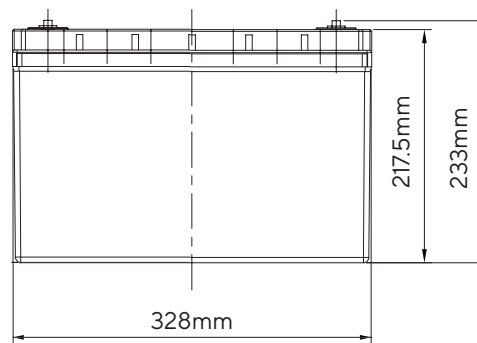
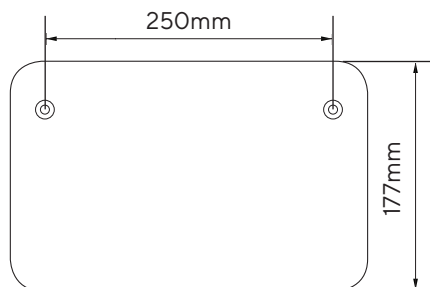
COMPOSITION INFORMATION

Max Discharge Current	120A
Peak Discharge Current	120A-150A (3 mins)
BMS Discharge Current Cut Off	>150A (6s)
BMS High Temperature Cut Off	50°C Charge/60°C Discharge
Recommended Low Voltage Disconnect	≥11.2V
Reconnect Voltage	≥12.8V
Short Circuit Protection	700A

TEMPERATURE SPECIFICATIONS

Discharge Temperature	-20~60°C
Charge Temperature	0~50°C
Storage Temperature	-20~40°C
BMS High Temperature Cut-Off	85°C±5°C

DIMENSIONAL SPECIFICATIONS



MECHANICAL SPECIFICATIONS

Dimensions inc terminals; Drop in group 30H, 31 (LxWxH)	328 x 177 x 233mm
Dimensions without terminals (LxWxH)	328 x 177 x 217,5mm
Weight	11.9kg
Terminal Type	Copper pole, M8
Terminal Torque	<10N.m
Case Material	ABS UL94V-0+PC
Enclosure Protection (IP rating)	IP54
Cell type - Chemistry	LiFePO4

CHARGE SPECIFICATIONS

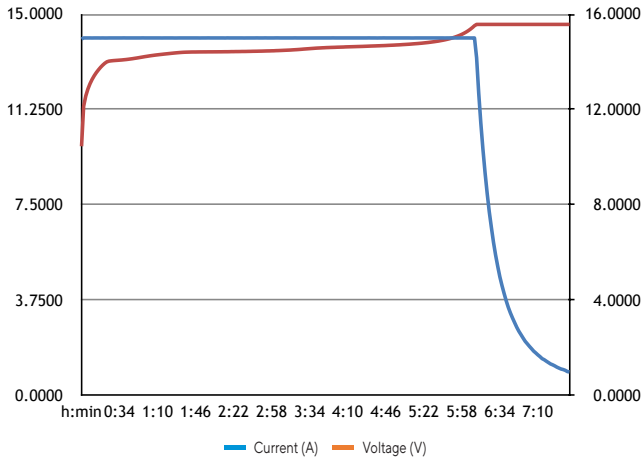
Recommended Charge Current	20-50A
Maximum Charge Current	100A
BMS Charge Current Cut Off	>100A
Recommended Charge Voltage	14.4V-14.6V
BMS Charge Voltage Cut Off	3.75V±0.025V/cell
Reconnect Voltage	2.95V±0.02V/cell
Balancing Voltage	3.45V/cell

COMPLIANCE SPECIFICATIONS - CERTIFICATION

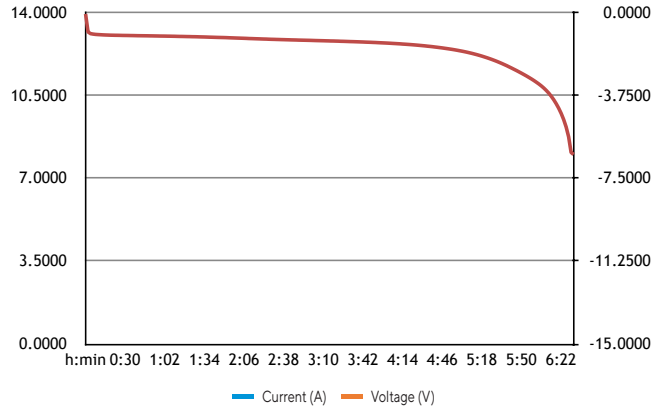
Certifications	CE	ZRLK
	Rohs	TUV
Shipping Classification	MSDS	UN38.3

PERFORMANCE CHARACTERISTICS

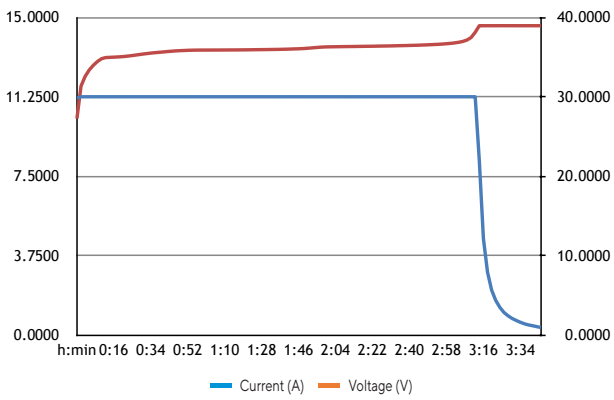
15A Charge @ 5°C



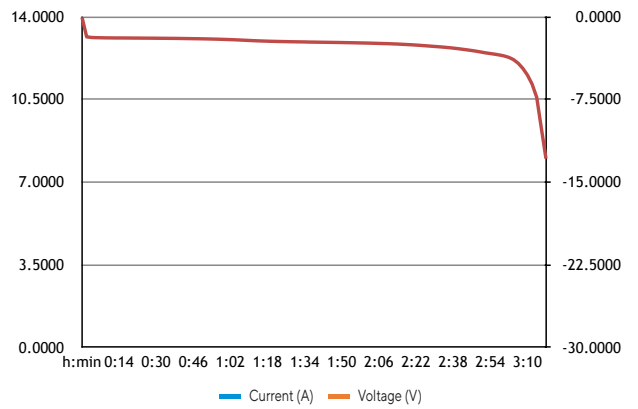
15A Discharge @ 5°C



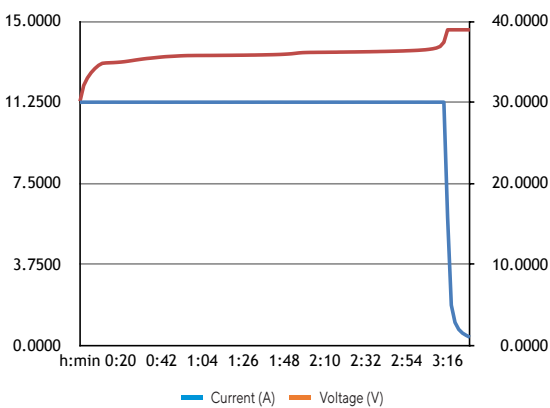
30A Charge @ 25°C



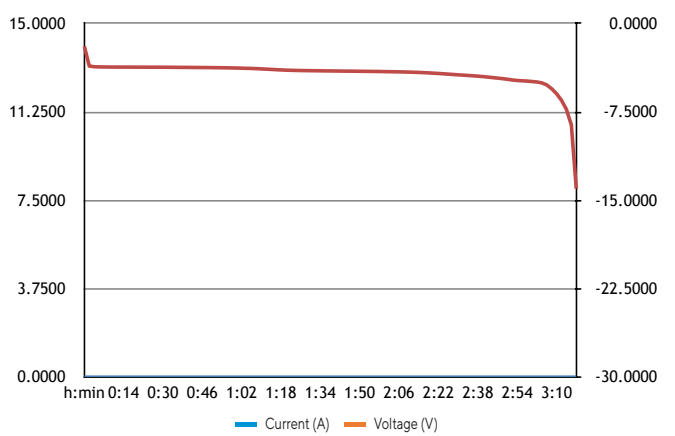
30A Discharge @ 25°C



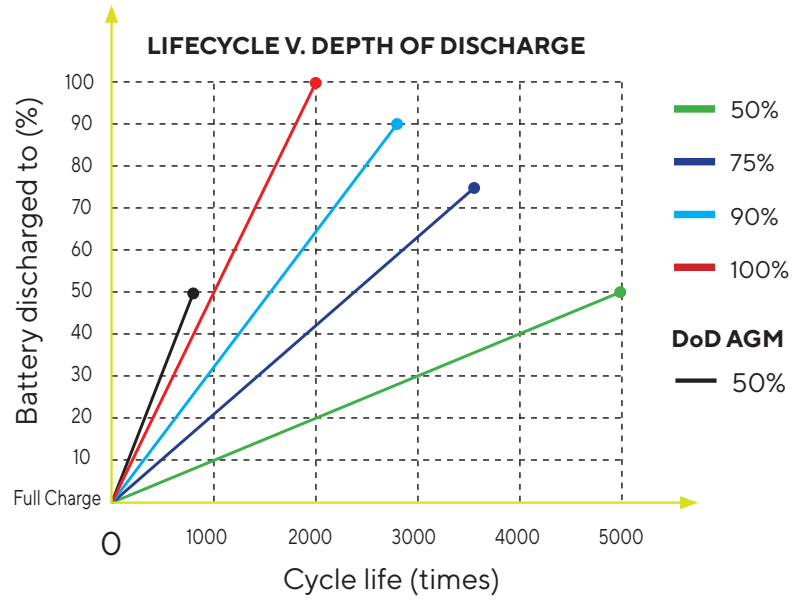
30A Charge @ 35°C



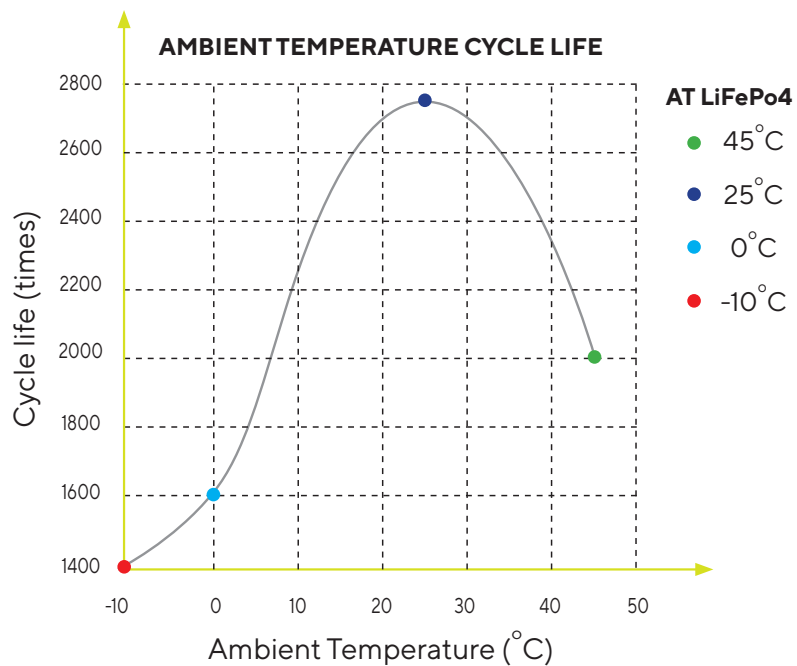
30A Discharge @ 35°C



PERFORMANCE CHARACTERISTICS



Depth of Discharge	100% DOD	90% DOD	75% DOD	50% DOD
Cycle life (times)	2000	2750	3500	5000



Ambient Temperature	-10°C	0°C	25°C	45°C
Cycle life (times)	1400	1600	2750	2000

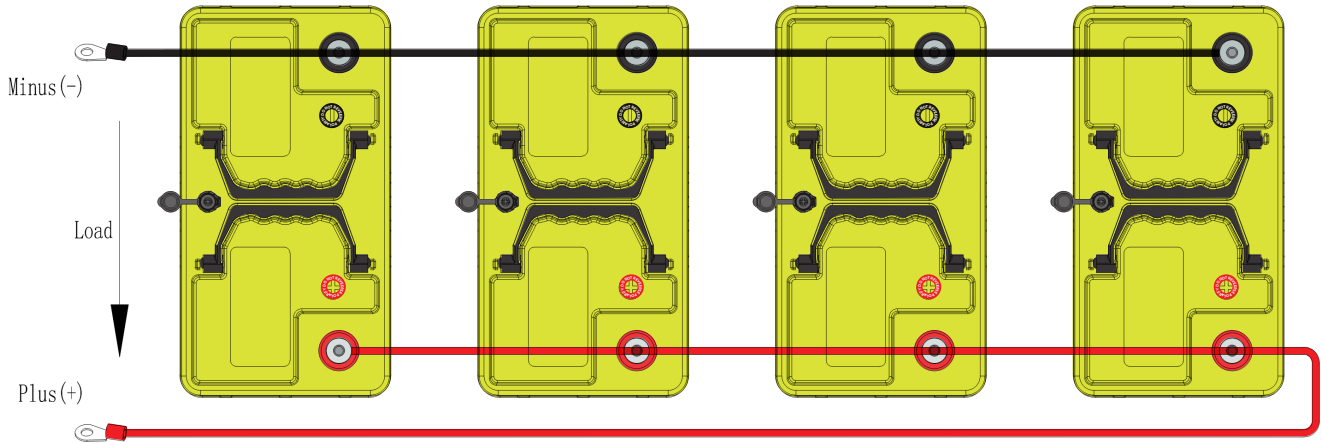
POWER BANK CREATION

The Lifos 105 (v) can be connected up in parallel or series when needed but only in the below configurations:

PARALLEL	SERIES			
	1 (12v)	2 (24v)	3 (36v)	4 (48v)
1	YES	YES	YES	YES
2	YES	YES	YES	YES
3	YES	YES	NO	NO
4	YES	YES	NO	NO

POWER BANK APPLICATION

4 parallel



4 Series/48V

