

LITHIUM IRON PHOSPHATE BATTERY



Lifos 105 (v1) 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

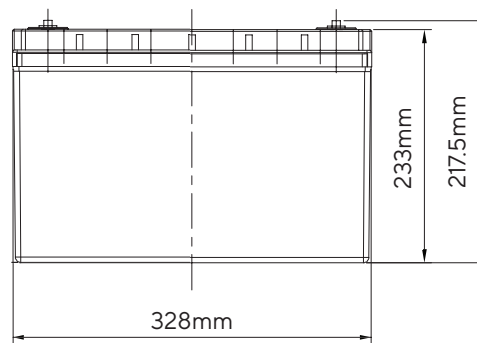
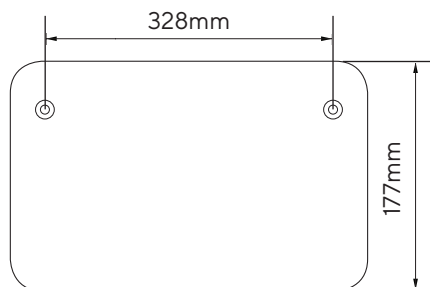
COMPOSITION INFORMATION

Max Continuous Discharge Current	120A (30 mins)
Peak Discharge Current	120A-150A (under 30 seconds)
BMS Discharge Current Cut Off	150A
BMS High Temperature Cut Off	50°C Charge/60°C Discharge
Recommended Low Voltage Disconnect	≥11.2V
Reconnect Voltage	≥12.8V
Short Circuit Protection	≥400A

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 217.5mm
Dimensions without terminals (LxWxH)	328 x 177 x 233mm
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

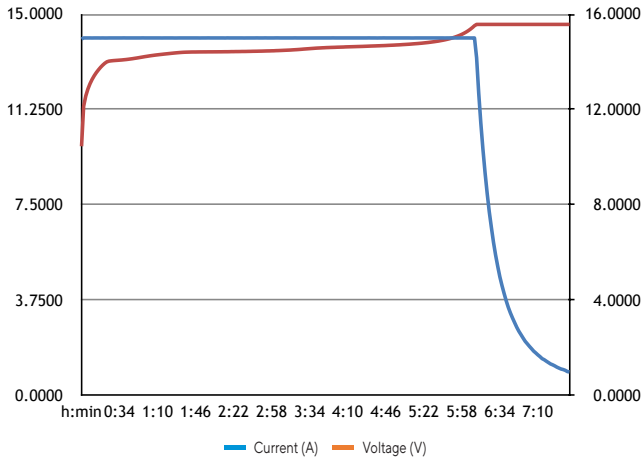
Recommended Charge Current	20-50A
Maximum Charge Current	100A
BMS Charge Current Cut Off	>100A
Recommended Charge Voltage	14.4V-14.6V
BMS Charge Voltage Cut Off	3.85V±0.025V/cell
Reconnect Voltage	3.0V±0.1V/cell
Balancing Voltage	3.45V/cell

COMPLIANCE SPECIFICATIONS - CERTIFICATION

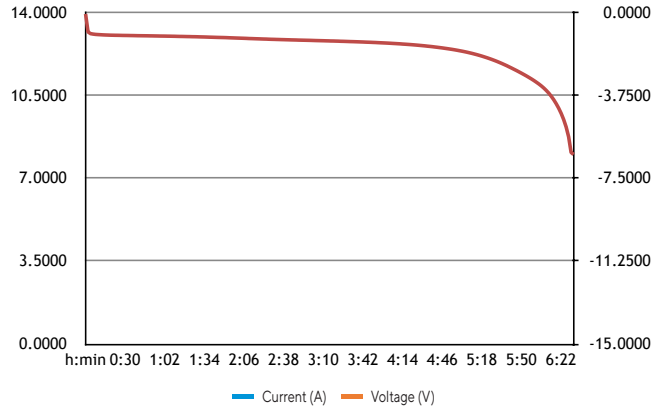
Certifications	CE	ZRLK
	Rohs	TUV
Shipping Classification	MSDS	UN38.3

PERFORMANCE CHARACTERISTICS

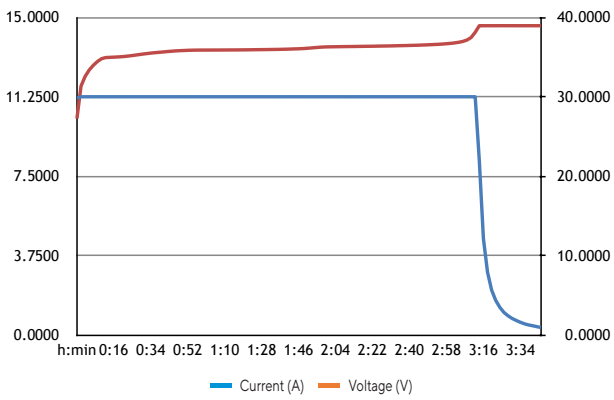
15A Charge @ 5°C



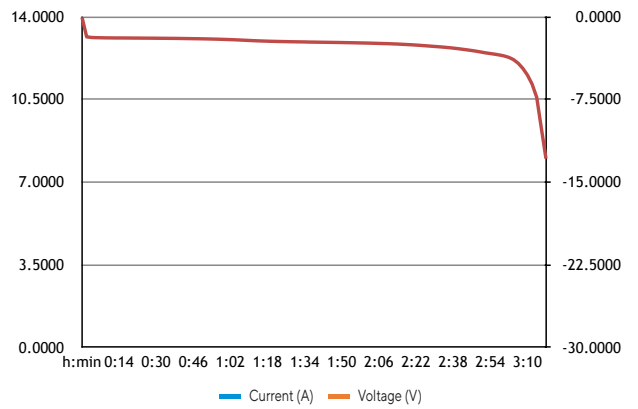
15A Discharge @ 5°C



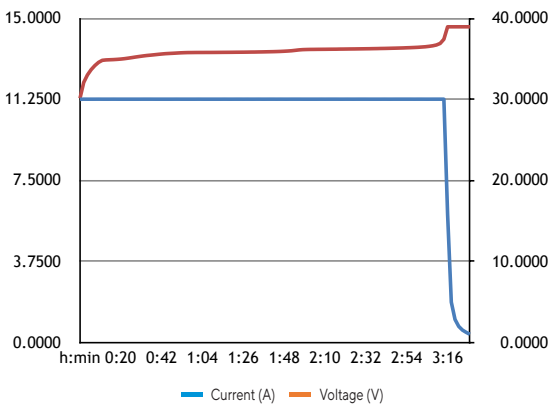
30A Charge @ 25°C



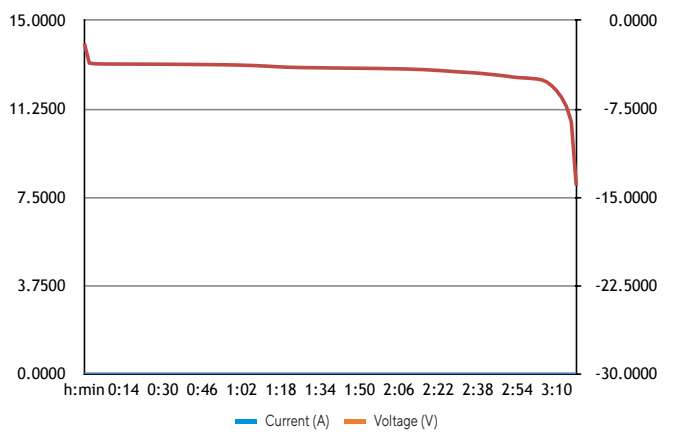
30A Discharge @ 25°C



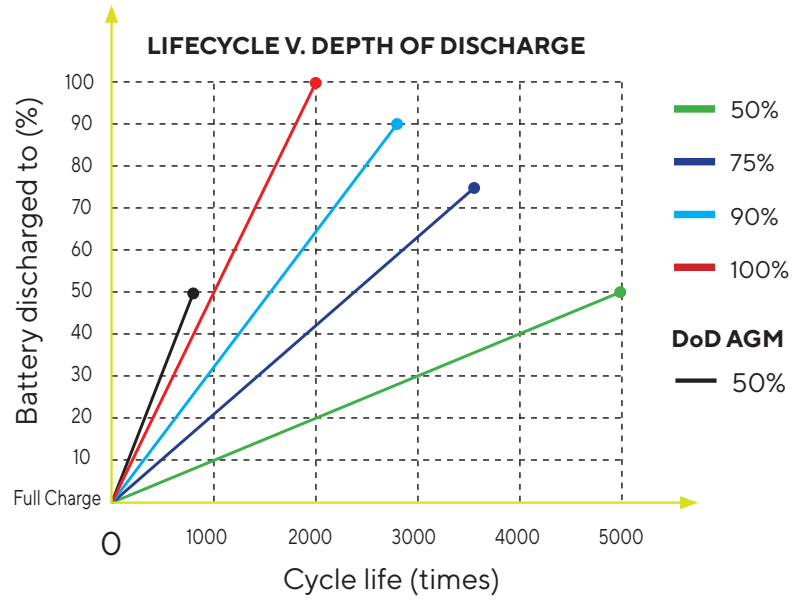
30A Charge @ 35°C



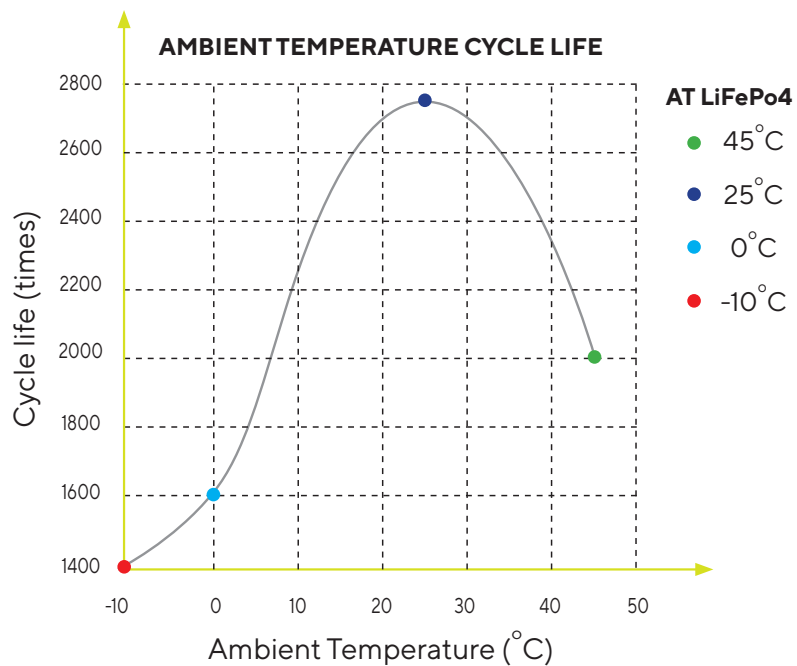
30A Discharge @ 35°C



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

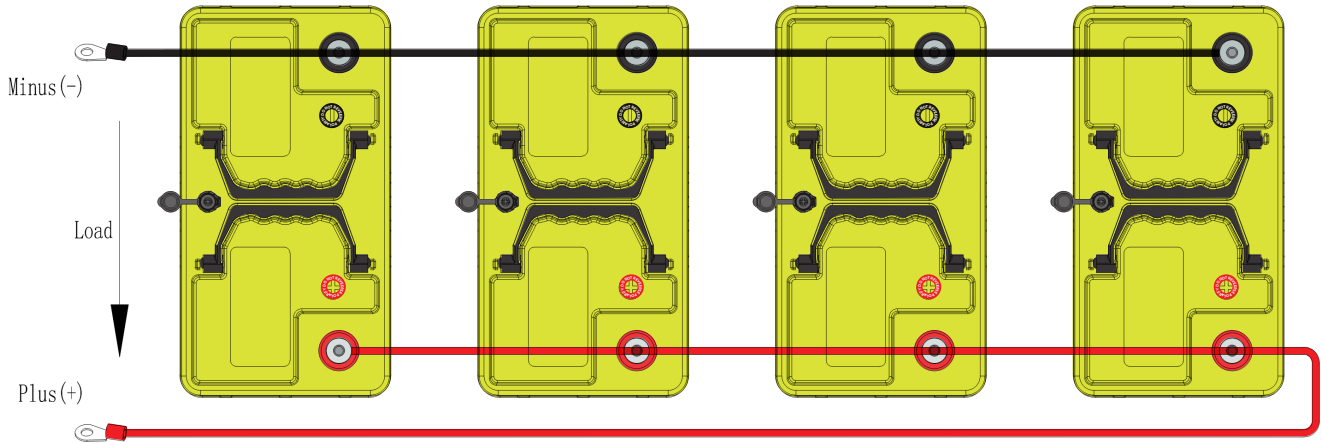
POWER BANK CREATION

The Lifos 105 (v1) 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

