

LITHIUM IRON PHOSPHATE BATTERY



Lifos 68 (v2) Technical Data Sheet

ELECTRICAL SPECIFICATIONS

| | |
|--|---------------|
| Nominal Voltage | 12.8V |
| Nominal Capacity | 68Ah |
| Energy | 870Wh |
| Resistance | ≤20mΩ |
| 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 | <80A |
| Peak Discharge Current | 80A-120A (under 10 seconds) |
| BMS Discharge Current Cut Off | 120A±5A |
| 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 |

MECHANICAL SPECIFICATIONS

| | |
|--------------------------------------|---------------------|
| Dimensions inc terminals (LxWxH) | 257.5 x 175 x 200mm |
| Dimensions without terminals (LxWxH) | 257.5 x 175 x 190mm |
| Weight | 7.8kg |
| Terminal Type | Copper pole, M8 |
| Terminal Torque | <8N.m |
| Case Material | ABS UL94V-0+PC |
| Enclosure Protection (IP rating) | IP54 |
| Cell type - chemistry | LiFePO4 |

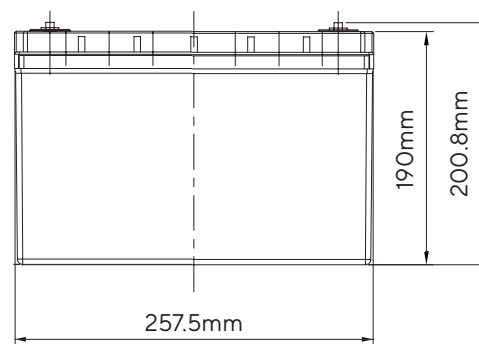
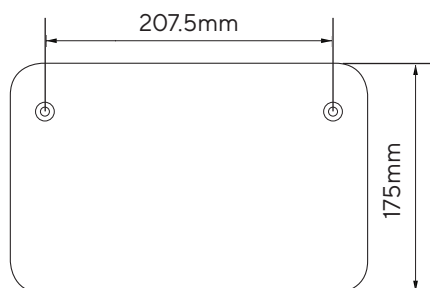
CHARGE SPECIFICATIONS

| | |
|----------------------------|-------------------|
| Recommended Charge Current | 10-30A |
| Maximum Charge Current | 40A |
| BMS Charge Current Cut Off | >40A |
| 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

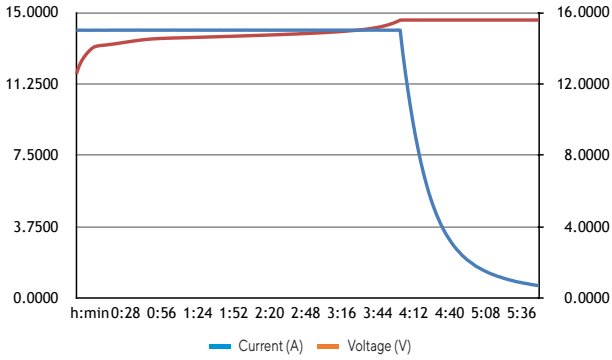
| | | |
|-------------------------|------|--------|
| Certifications | CE | TUV |
| | Rohs | TUV |
| Shipping Classification | MSDS | UN38.3 |

DIMENSIONAL SPECIFICATIONS

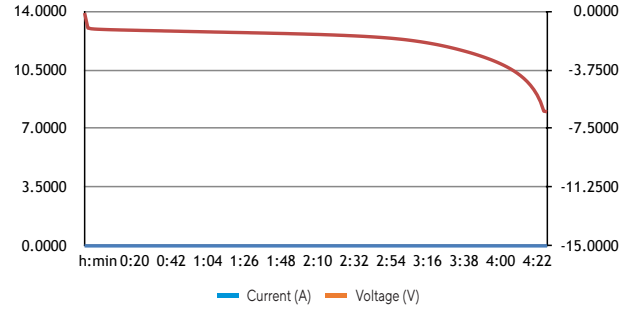


PERFORMANCE CHARACTERISTICS

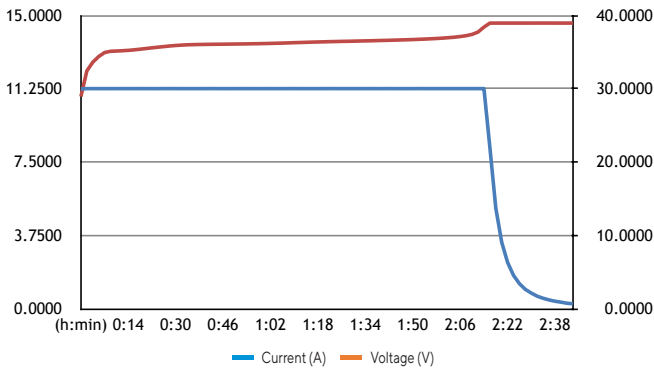
15A Charge @ 5°C



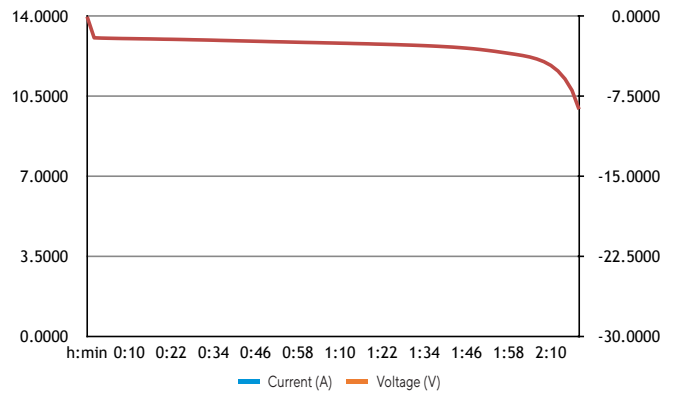
15A Discharge @ 5°C



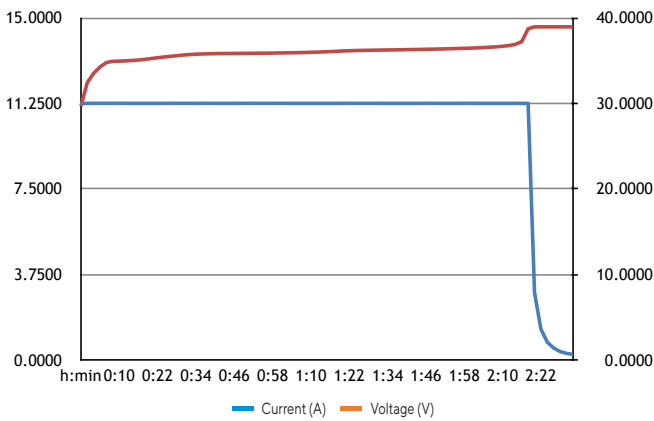
30A Charge @ 25°C



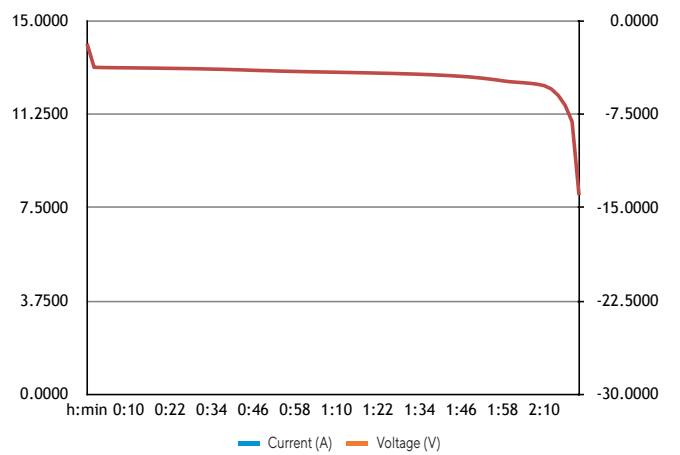
30A Discharge @ 25°C



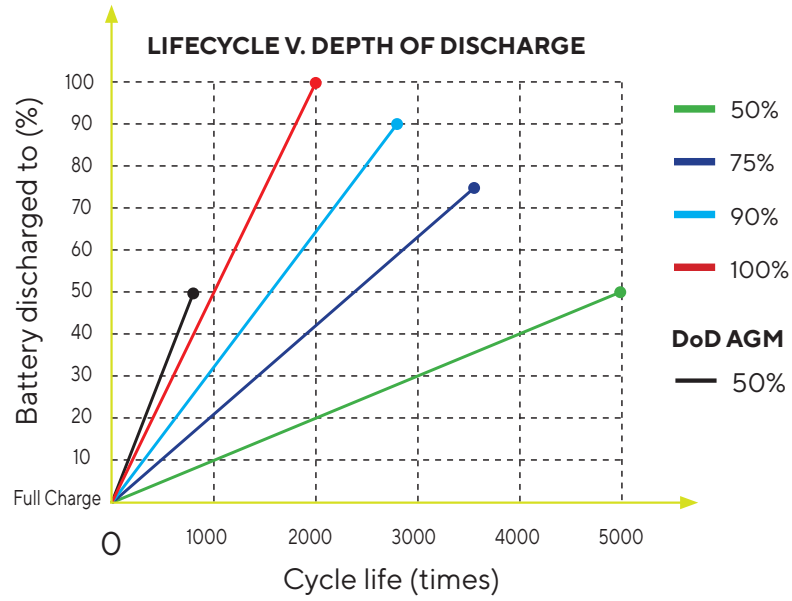
30A Charge @ 35°C



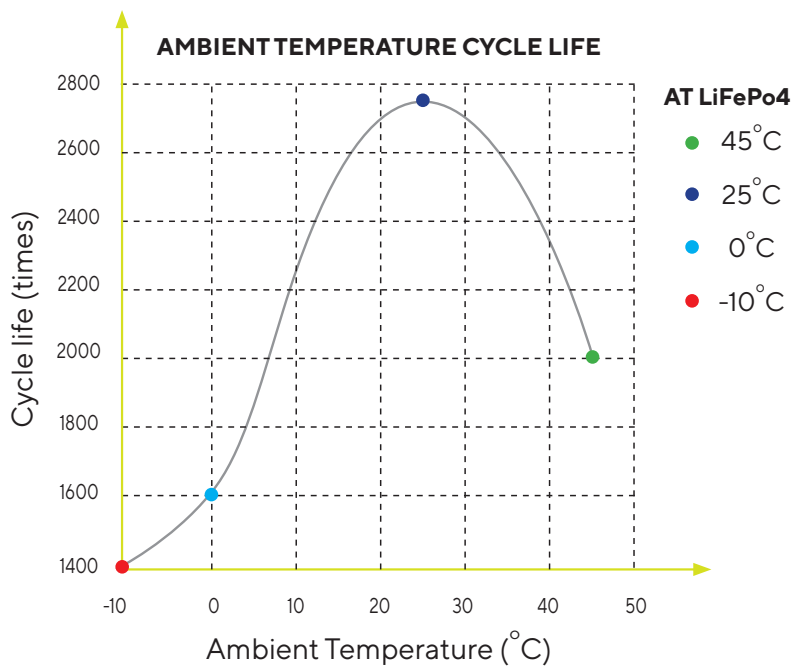
30A Discharge @ 35°C



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 |

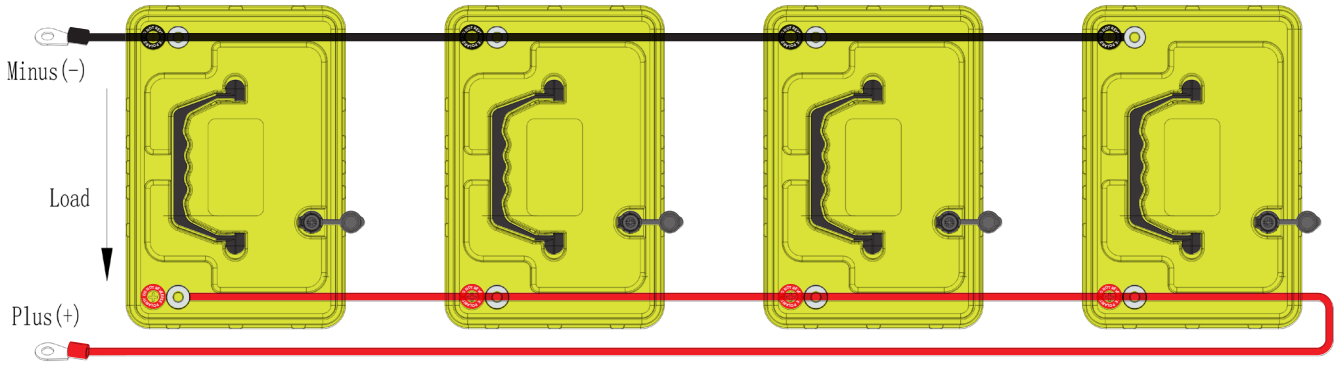
POWER BANK CREATION

The LiFOS 68 (v2) 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

