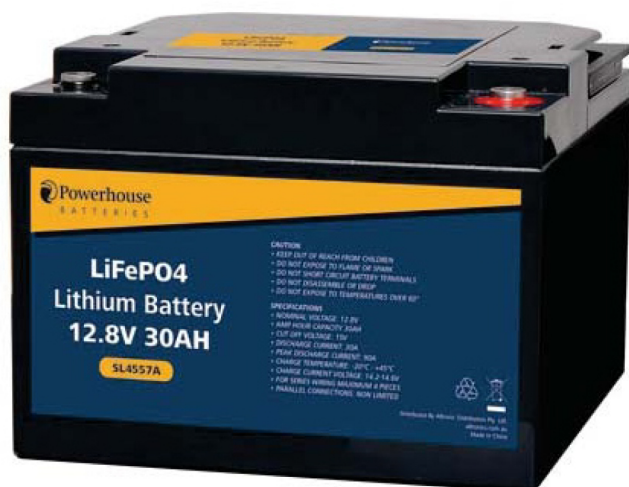


LiFePO4 Lithium Iron Phosphate Batteries

12V30AH

Model:SL4557A


Powerhouse
BATTERIES


The latest generation in maintenance free batteries is here! LiFePO4 batteries offer longer service life than traditional lead acid batteries, plus weigh less than HALF as much as SLA batteries. LiFePO4 also provide more usable life per cycle, allowing for longer run times by holding a higher voltage until capacity is almost exhausted. These batteries will also maintain 80-90% charge when in storage - far higher than their lead acid counterparts.

Each battery is fitted with an internal battery management system to provide safe charging and discharging at all times. This system provides internal short circuit, over temperature and under/over voltage cut off. Can be wired in series and/or parallel.



Applications



BATTERY SPECIFICATIONS

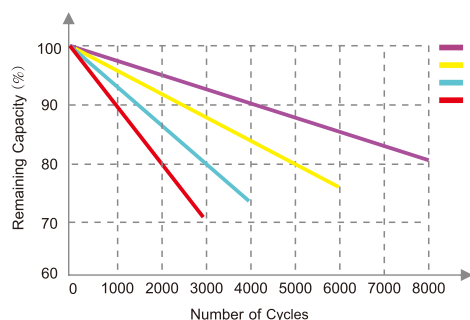
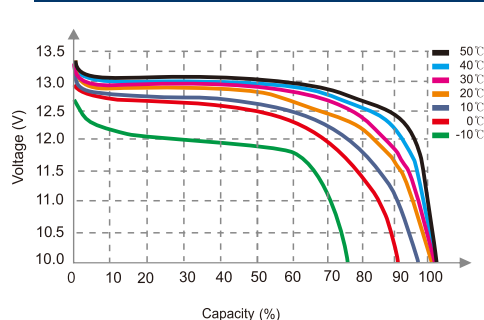
| | | | |
|-------------------------------|---------------------|---------------------------------|---------------------|
| Battery Type - Chemistry | LiFePO ₄ | Internal Resistance - Milliohms | < 15mΩ |
| Nominal Voltage | 12.8 V | Efficiency - round trip | > 99.5% |
| Amp Hour Capacity | 30 AH | Self Discharge per Month | < 3% |
| Energy Density | 384 Wh | Max 4 - series connections | 12-48V |
| Dimensions (L*W*H) | 166*175*125 mm | Parallel connections | No Limited |
| Weight | 3.6 KG | Case IP Rating | IP65 |
| Terminal Type | M6 | Design Life | 20 Years |
| Terminal Torque | 8.5 NM | Cycle Life (1C, 25°C@80%DOD) | >4000 cycles |
| Case Material | ABS | Cycle Life (0.2C, 25°C@80%DOD) | >6000 cycles |
| BMS build-in | Yes | Discharge Temperature | (-23 to 65)°C |
| Recommend Charge Voltage | 14.2 ± 0.20V | Charge Temperature | (-3 to 65)°C |
| Max Charge Voltage | 14.8 ± 0.20V | Storage Temperature | (-20 to 45)°C |
| Recommend Charge current | 6 A | Bluetooth(APP) | Optional |
| Max Charge Current | 30 A | LCD Screen | Optional |
| Charge Current (0 to -10°C) | <0.1C | Heating functions -20°C | Optional By Charger |
| Charge Current (-20 to -10°C) | <0.05C | Batteryself heating function | Optional By Cell |
| Recommend Discharging voltage | 10.8 ± 0.20V | Shipping Classification | UN3480, CLASS9 |
| Max Discharging Voltage | 8.8 ± 0.20V | Other Certifications | CB /CE |
| Max Discharge Current | 30 A | | |
| Pulse Discharge Current | 90A/3S | | |

LiFePO4 Lithium Iron Phosphate Batteries**12V30AH****Model:SL4557A****BMS SPECIFICATIONS**

BMS Version: JBD

BMS Protections Range: Over (Voltage, Current, Temperature management) and cell balance

| | | |
|------------------------------------|--|---|
| Over Charging Cell protection | $>3.75\pm0.03V$ | Delay 500ms-1500ms |
| Over Charging Pack protection | $>15.0\pm0.12V$ | Delay 500ms-1500ms |
| Over Charging Current 1 | $50\pm15A$ | Delay 500ms-1500ms |
| Over Charging Current 2 | -- | Delay 500ms-1500ms |
| Over Charging Temp Protection 1 | $-2\pm5^{\circ}C$ or $54\pm5^{\circ}C$ | Release $2\pm5^{\circ}C$ or $49\pm5^{\circ}C$ |
| Over Discharging Cell protection | $<2.2\pm0.08V$ | Delay 500ms-1500ms |
| Over Discharging Pack protection | $<8.8\pm0.32V$ | Delay 500ms-1500ms |
| Over Discharging current 1 | $250\pm80A$ | Delay 100ms-400ms |
| Over Discharging current 2 | $500\pm200A$ | Delay 10ms-40ms |
| Over Discharging Temp Protection 1 | $75\pm5^{\circ}C$ | Release $60\pm5^{\circ}C$ |
| PCB Temp protection | $90\pm8^{\circ}C$ | Release $65\pm15^{\circ}C$ |
| Cell Balance Start | $3.50\pm0.05V$ | |
| Cell Balance Current | $200\pm50mA$ | |
| Short circuit | $1000\pm300A$ | Delay 200-800us |

Different DOD Discharge Cycle Life Curve 1C 25C**Different Temperature Discharge Curve(0.2C)****State of Charge Curve(0.5C, 25°C)**