jpm COMMUNICATIONS

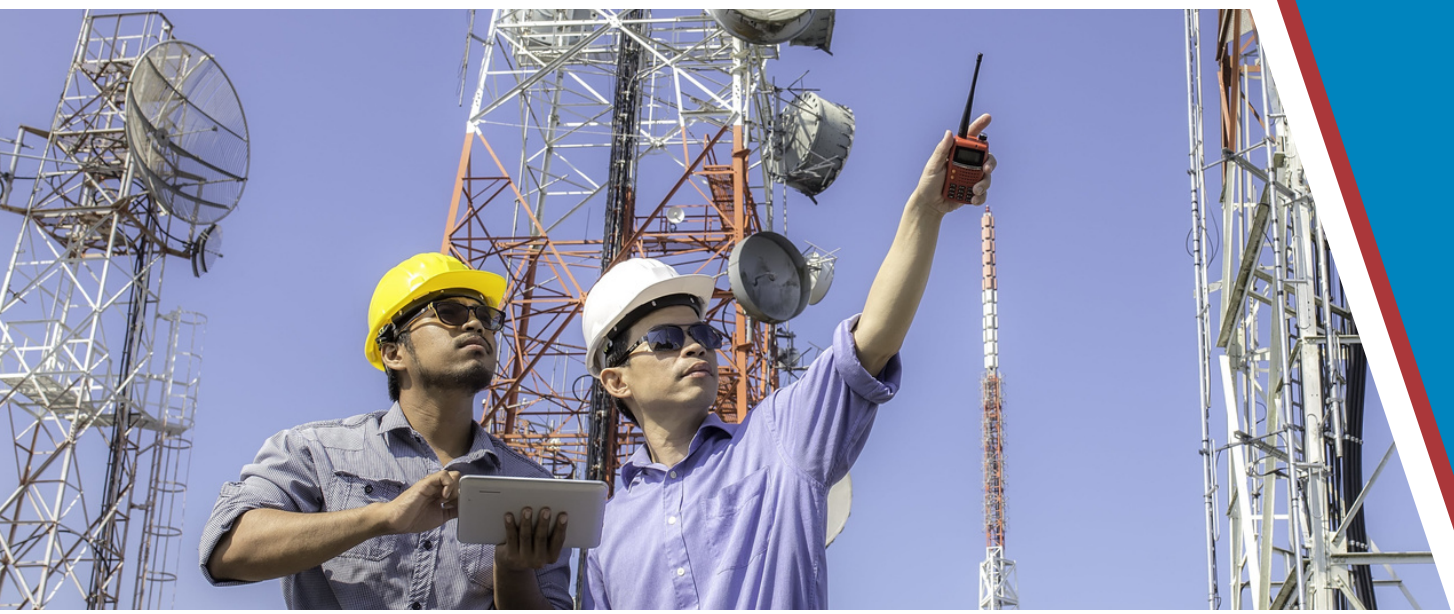
MEGAPOWER JPM

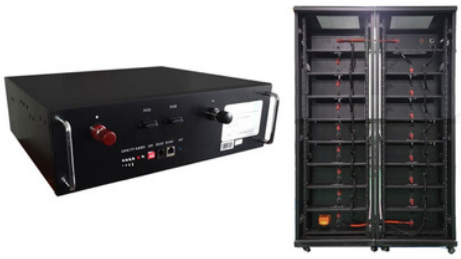
10- 12 year life span

5 year warranty

# LITHIUM BATTERY

## 48V 100Ah LiFePO4



## FEATURES:

- Drop-in replacement for lead-acid batteries
- Telecom Back up battery - Custom sizes and specs
- Holds a charge for up to 1 year without a load, and no need for a trickle charger – great for unattended storage
- Longer life compared to lead-acid battery
- Up to 60% weight saving
- 100% usable capacity
- Built-in safety protection
- Zero maintenance
- Protections: voltage; short circuit & temperature

### LiFePO4 VS Lead-Acid Batteries

| | | |
|---|---|---|
| | SLA Battery | 3 YRS |
| | LiFePo4 Battery | 10 YRS |
| | SLA Battery | ~200 |
| | LiFePo4 Battery | >3000 |
| LB | SLA Battery | 3x the Weight |
| LB | LiFePo4 Battery | 1/3 |

# TECHNICAL SPECIFICATIONS

| ITEMS | PARAMETER |
|---|---|
| Battery Type | LiFePO4 |
| Nominal Voltage | 48V |
| Nominal Capacity | 100Ah |
| Energy | 4800 WH |
| Dimensions (L x W x H) | 442*520*177MM |
| Weight | 42KG |
| Case Material | ABS/Iron case |
| Certifications | CE/ISO/UN38.3/MSDS |
| Efficiency | 99% |
| Self Discharge | <1% per Month |
| Series & Parallel Application | max. 4 series or 4 parallel connected application |
| Peak Discharge Current | 200 A |
| Continus Discharge Current | 100 A |
| Operation Temperature Range | -20~60℃ |
| Voltage at end of Discharge | 48 V |
| Working Voltage | 37.5-54V |
| Discharge Temperature | -4 to 140 ºF (-20 to 60 ºC) |
| Charge Temperature | 32 to 113 ºF (0 to 45 ºC) |
| Storage Temperature | 23 to 95 ºF (-5 to 35 ºC) |
| Cycle Life | > 3500 cycles, D.O.D. 80%, standard use |
| Self-Discharge Rate | Residual capacity: ≤3%/month; ≤15%/years |
| | Reversible capacity: ≤1.5%/month; ≤8%/years |
| Storage Temperature & Humidity Range | Less than 1 month: -20℃~35℃, 45%RH~75%RH |
| | Less than 3 months: -10℃~35℃, 45%RH~75%RH |
| | Recommended storage environment: 15℃~35℃, 45%RH~75%RH |
| Single voltage acquisition | ±5mV |
| Temperature acquisition accuracy | ±2oC |
| Current acquisition accuracy | ≤±0.5% FSR |
| Balance current accuracy | ≤100mA |
| Protective function | Overcurrent protection, overcharge protection, over-discharge protection, high and low-temperature protection, abnormal alarm function |
| Battery SOC working range | 0-100% |

| Models | Voltage (V) | Nominal Capacity (AH) | Max.charge current (A) | Weight (kg) +/-5% | Dimension (+/-3mm) | | | Cycle life DOD 100% |
|---|---|---|---|---|---|---|---|---|
| | | | | | L (mm) | W (mm) | H (mm) | |
| B-LFP24-10 | 24 | 10 | 5 | 3 | 181 | 77 | 167 | >2000 |
| B-LFP48-10 | 48 | 10 | 5 | 8.4 | 442 | 285 | 44 | >2000 |
| B-LFP48-12 | 48 | 12 | 5 | 7 | 300 | 150 | 100 | >2000 |
| B-LFP48-16 | 48 | 16 | 5 | 8 | 300 | 150 | 100 | >2000 |
| B-LFP36-15 | 36 | 15 | 5 | 7 | 395 | 70 | 62 | >2000 |
| B-LFP48-18 | 48 | 18 | 5 | 9 | 603 | 68 | 63 | >2000 |
| B-LFP48-20 | 48 | 20 | 10 | 15 | 442 | 285 | 88 | >2000 |
| B-LFP48-30 | 48 | 30 | 10 | 21 | 442 | 360 | 88 | >2000 |
| B-LFP48-40 | 48 | 40 | 20 | 27 | 442 | 325 | 132 | >2000 |
| B-LFP48-50 | 48 | 50 | 20 | 33.5 | 442 | 400 | 132 | >2000 |
| B-LFP48-60 | 48 | 60 | 20 | 39 | 442 | 460 | 132 | >2000 |
| B-LFP48-80 | 48 | 80 | 20 | 52 | 442 | 450 | 177 | >2000 |
| B-LFP48-100 | 48 | 100 | 50 | 42 | 442 | 520 | 177 | >2000 |
| B-LFP48-112 | 48 | 112 | 50 | 66 | 130 | 95 | 150 | >2000 |
| B-LFP48-150 | 48 | 150 | 50 | 77 | 442 | 520 | 280 | >2000 |
| B-LFP48-200 | 48 | 200 | 50 | 110 | 442 | 520 | 320 | >2000 |
| B-LFP48-224 | 48 | 224 | 50 | 168 | 150 | 90 | 300 | >2000 |

Please contact us for more information about capacities and models.

**BSLBATT® batteries** are based on Lithium iron battery technology **(LiFePO4)**. Compared to lead-acid alternatives, this **48V100Ah** battery is the **perfect combination** of size and capacity to fit many applications including, **Telecom** and **solar energy** systems and more. It's a **lightweight alternative** to lead-acid.

Lithium battery has an integrated BMS (**Battery Management System**)
Our lithium battery will provide you with 100% depth of discharge for over 2000 cycles. After 2000 cycles, the battery will still have at least 70% of its rated capacity.
The "BSLBATT" is perfect for Solar, Telecom, Electric Vehicle and any other deep cycle applications.

# BATTERY MANAGEMENT SYSTEM

The lithium batteries are supplied with Battery Management System that can monitor and optimize each single cell during charge and discharge, to protect the battery pack from damage agains over-charge, over-discharge, short circuit. The BMS helps to ensure safe and accurate running.

| Items | Content | Specification |
|---|---|---|
| Over Charge | Over-charge protection for each cell | 3.8±0.03V |
| | Over-charge release for each cell | 3.60±0.05V |
| | Over-charge release method | Under the release voltage |
| Over Discharge | Over-discharge protection for each cell | 2.3±0.05V |
| | Over-discharge release for each cell | 2.8±0.05V |
| | Over-discharge release method | Charge to recovery |
| Over Current | Over discharge current protection | 300A~500A |
| | Protection delay time | 50ms～200ms |
| | Over current release method | Delay about 8S after recovery |
| Short Circuit | Do not short-circuit the electrodes | Designed for 600A/500us |
| Battery Temperature | Charge over temperature | Protection @ 65±5℃ |
| | | Release @ 50±5℃ |
| | Discharge over temperature | Protection @ 65±5℃ |
| | | Release @ 50±5℃ |
| | MOSFET over temperature | Protection @ 103±10℃ |
| | | Release @ 75±10℃ |

LiFePO4 batteries can be discharged up to 100% without risk of damage. Make sure you charge your battery immediately after discharge. We recommend discharging be limited to 80-90% depth of discharge (DOD) to avoid the BMS disconnecting the battery.

**Standard Compliance**

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