

LFP Battery Modules

Economical, scalable and safe battery systems



Energy storage

LFP-48-50 / 48-50S 2.5 kWh modules

The new StorTera LFP battery range - scalable energy storage from 2.5 to 200 kWh



LFP-48-50S model shown

Safe and scalable

StorTera LFP battery modules are a practical and economical battery system based on Lithium-iron-phosphate technology (LFP or LiFePO_4).

Available in standard 2.5kWh modules, the LFP battery modules can be easily scaled in multiples up to 200kWh in a single installation, making them suitable for a range of applications.

Efficient

StorTera's LFP battery modules feature a round-trip efficiency of 92%, low self discharge rate of 2+ years, and unlike traditional

lead-acid battery storage, even under shallow discharge conditions (>80% charge) will still achieve 90% efficiency.

Smart battery management system

StorTera LFP Battery Modules are available in two versions which both feature an integrated smart battery management system (BMS) which includes 2-tier protection and individual cell level monitoring.

The LFP-48-50S model has additional communication options that allow comprehensive access to the smart BMS using the Modbus communication protocol.



5000+
cycles



Scalable
2.5kWh
up to 200kWh



Inherently
SAFE
in operation



LOW
cost

Highlights

- Long lifetimes - 6000 cycles @85% DOD (dependant on actual DOD, usage & temp.) and low self-discharge rate
- Easily scalable and stackable 2.5kWh modules - up to 200kWh in a single installation
- 2-tier protection & StorTera engineered BMS with cell level monitoring
- Short circuit/Over Current/Over Voltage protection
- LFP-48-50S model features 2x RS485 and 1x RS282 ports for access to smart BMS (Modbus RTU protocol)
- Simple rack-based installation system

StorTera's LFP battery modules are supported and optimised for use with the **DSR GridVerter** product family.

DSR GridVerters feature all-in-one inverter functionality and when paired with LFP battery storage modules ensure the optimal operation and maximum cycle lifetime from your batteries.

With this range of products StorTera can provide a comprehensive range of solutions to suit a wide range of domestic, commercial and industrial scale installations.



Simple, scalable rack based installations

LFP vs. Li-ion?

Lithium-iron-phosphate technology is the safest of all the common lithium battery types. In comparison to Lithium-Ion, our LFP batteries have:

- Longer lifetimes
- No cooling requirements
- Superior thermal and chemical stability
- No fire risk

| MODEL | LFP-48-50 / LFP-48-50S |
|---------------------------------------|--|
| PERFORMANCE | |
| Rated Capacity (5hr) | 50 Ah |
| Nominal Voltage | 51.2 V |
| Discharge Ending Voltage | 43.2 V |
| Charging Limited Voltage | 57.6 V |
| Max. Charging Current | 50.0 A |
| Max. Continuous Discharging Current | 50.0 A |
| Parallel Connection | Optional (up to 16P). When paralleling Max. charging current = 20A |
| Containing Cell | 3.2V 50AH |
| Design Life | More than 10 years |
| Cycle Life | 6000 cycles @85% DOD (dependant on actual DOD, usage & temp.) |
| Discharge Rate | 1C |
| Response Time | > 1ms |
| MECHANICAL SPECIFICATIONS | |
| Dimensions (W*D*H) | 442 * 480 * 132 mm |
| Weight | 41.5 Kg |
| Enclosure | 3U steel enclosure with protection handles |
| IP Class | IP30 |
| Communication Ports (LFP-48-50S only) | 2 * RS485, 1 * RS485 |
| OTHER | |
| Operating Temperature | Charging: 0 to +45°C / Discharging: -20 to +60°C |
| Storage Temperature | -20 to +60°C |
| Humidity | 5% to 95% Relative Humidity (Non-condensing) |
| Certification | CE, TUV |
| Warranty | 5 years |

Product specifications subject to change without prior notice.

