



48V PowerBrick+ Lithium-Ion battery pack offer a high level of security through the use of cylindrical cells Lithium Iron Phosphate (LiFePO4) and a built-in BMS.

PowerBrick+ product line is designed to advantageously replace lead batteries, offering more than doubled capacity and twice lower weight.

Each battery has a 48V nominal voltage and can be assembled in series (up to 2 items) or/and parallel (up to 10 items). Operating voltage can then be set to 48V or 96V.

The battery is enclosed in a sealed ABS case, resistant to moisture and dust (IP66).

PowerBrick+ battery systems are lightweight, reliable and environmentally-friendly solutions for multiple usages. These batteries can take place as a direct drop-in replacement of old-fashion and low-performance Lead Acid batteries (VRLA, AGM, etc.).

The PowerBrick+ product line is covered in standard by a 2 years commercial warranty. This warranty can be extendable to 5 full years.



Key Points

- **48V battery pack – Lithium Iron Phosphate (LFP)**
- **Continuous Maximum discharge current : 50A**
- **10s Maximum discharge current : 100A**
- **Maximum charge current : 25A**
- **High safety with advanced Built-in Battery Management System**
- **Monitoring of cell and PCB temperature, current, voltage, SOC**
- **Serial assembly can range from 48V to 96V (1S & 2S)**
- **Parallel assembly up to 10P**
- **Minimum 3000 cycles at 80% DOD (see chart tab)**
- **Robust design in an isolated and waterproof casing (IP66)**
- **Operating temperature in charge : 0°C à +60°C**
- **Operating temperature in discharge: -15°C à +60°C**
- **Sealed case (IP66 protection)**
- **100% Maintenance free**
- **CE, RoHS and UN38.3 certification**
- **L : 260mm x P : 168mm x H : 212 mm**
- **13.6Kg**
- **2 years commercial warranty as standard, extendable to 5 years**

Applications:

PowerBrick+ batteries are commonly used for Marine, Recreational vehicles, Golf Cart applications, CCTV, robotics, PV energy storage, etc. PowerBrick+ Battery can be used for any system or application that would normally use Lead acid battery (AGM, GEL).

After removing your old batteries, place PowerBrick+ battery in the same way. You may use the same cables to reconnect PowerBrick+ battery

48V battery pack - Lithium Iron-Phosphate (LiFePO₄) - 25Ah

- **High lifespan:** two thousand cycles and more (see chart)
- **Deep discharge** allowed up to 100 %
- Ultra safe **Lithium Iron Phosphate** chemistry (no thermal run-away, no fire or explosion risks)
- **Embedded BMS** (Battery Management System) : **improve lifespan AND secure the battery**
- **No Lead, no heavy metal, no toxic element**
- Calendar life > **10 years**
- Excellent **temperature** robustness (-20 °C up to +60 °C)
- **Flexible** deployment : up to 10 packs in parallel and 2 in serial
- **Constant power** during discharge (very low internal resistance)
- **Very low Peukert's losses** (energy efficiency >96 %)
- **Very low self discharge** (<3 % per month)
- **No memory effect**
- About **50 % lighter** and **40% smaller** than equivalent Lead-AGM battery with same usable energy
- **Certification** : CE, RoHS, UN 38.3, UL and CB

Technical Specifications

Electric	Nominal voltage	51.2 V
	Nominal capacity	25 Ah
	Stored energy	1280 Wh
	Internal resistance	≤ 50 mΩ
	Cycles	>2000 cycles (see chart)
	Self discharge	< 3% per month
	Energy efficiency	> 96 %
Standard Charge	Charge voltage	58.4 V ± 0.1V
	Charge mode	CC/CV : Constant Current / Constant Voltage
	Continuous charge current / Maximum charge current	12.5 A / 25 A
	BMS charge cut-off voltage	58.4 V ± 0.1V
Standard Discharge	Continuous discharge current	50 A
	Maximum discharge current	100 A (< 10s)
	BMS discharge cut-off voltage	44 V
Environment	Charge temperature range	0°C à 45°C @60±25% relative humidity
	Discharge temperature range	-20°C à 60°C @60±25% relative humidity
	Storage temperature	0°C à 40°C @60±25% relative humidity
	IP protection level	IP 66
Mecanical	Cell assembly	26650 - 16S8P
	Casing material	ABS
	Dimensions	L : 260mm x P : 168mm x H : 212 mm
	Weight	13.6 kg
	Terminal	M8

Dimensions

