



# PowerBrick+

## 12v Lithium-Ion battery pack



### 12V battery pack - Lithium Iron-Phosphate (LiFePO<sub>4</sub>) - 70Ah

- Ultra safe **Lithium Iron Phosphate** chemistry (no thermal run-away, no fire or explosion risks)
- **Embedded BMS** (Battery Management System)
- No **Lead**, no **rare earths**, no **acid**, no **degassing**
- **High Service Life : 3000 cycles** and more (see chart)
- Calendar life > **10 years**
- Excellent **temperature** robustness (-20 °C up to +60 °C)
- **Flexible** deployment : up to **16 packs in parallel** and **4 in series**
- **Constant power** during discharge (very low internal resistance)
- **Partial or deep discharge** allowed up to 100 %
- **Very low Peukert's losses** (energy efficiency >98 %)
- **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**

### Technical Specifications

Electric	Nominal voltage	12.8 V
	Nominal capacity	70 Ah
	Stored energy	896 Wh
	Internal resistance	≤ 40mΩ
	Cycles	>3000 cycles (see chart)
	Self discharge	< 3% per month
	Energy efficiency	> 98%
	Standard Charge	Charge voltage
Charge mode		CC/CV : Constant Current / Constant Voltage
Continuous charge current / Maximum charge current		35 A / 70A
BMS charge cut-off voltage		14.8 V ± 0.1V
Standard Discharge	Instant peak discharge current	250 A ± 30 A (max 100mS)
	Continuous discharge current	100 A (1.28 kW)
	Maximum discharge current (< 30s)	150 A (1.92 kW)
	BMS discharge cut-off voltage	10 V
Environment	Charge temperature range	0°C to +60°C
	Discharge temperature range	-20°C to +60°C
	Storage temperature	0°C to +50°C @60±25% relative humidity
	IP protection level	IP 65
Mechanical	Type of cells	Cylindrical
	Casing material	ABS
	Dimensions	L : 228mm x W : 138mm x H : 210 mm
	Weight	9.8 kg
	Terminal	M8 bolt



### APPLICATIONS

- **Electrical vehicles and utilities**
- **Robotics and AGVs**
- **Solar and wind energy storage**
- **Marine**
- **Street lightning**
- **CCTV and security camera**
- **UPS, electric back-up**
- **Telecom**
- **Medical equipments**
- • •

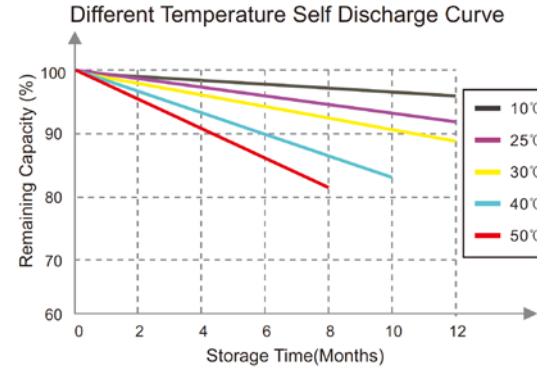
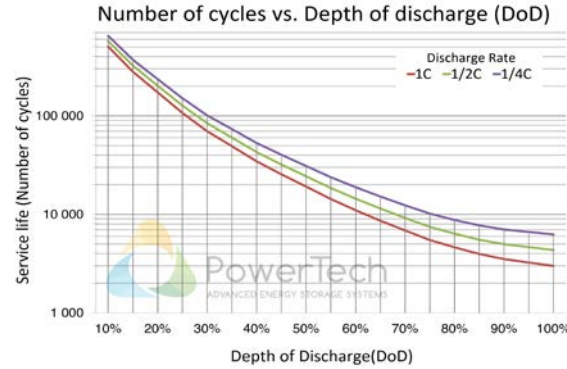
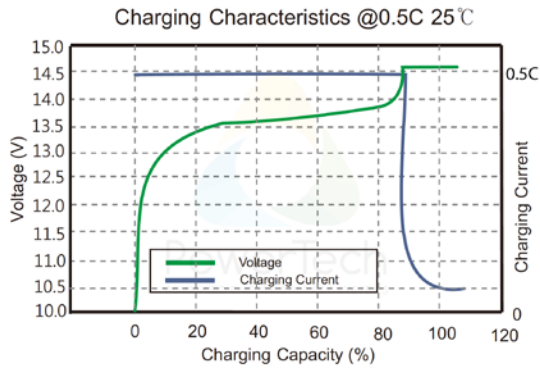
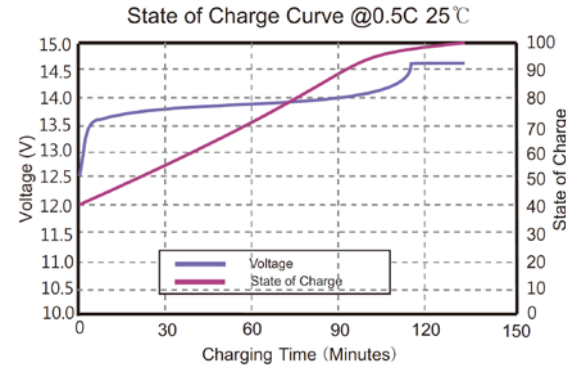
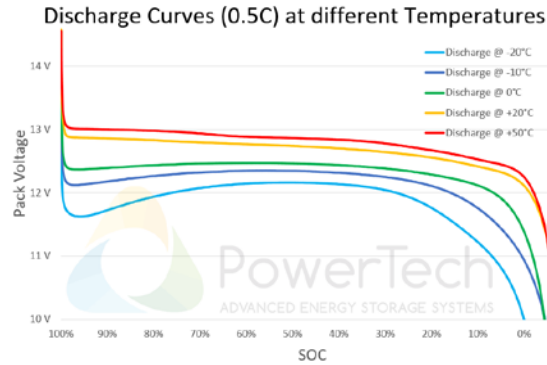
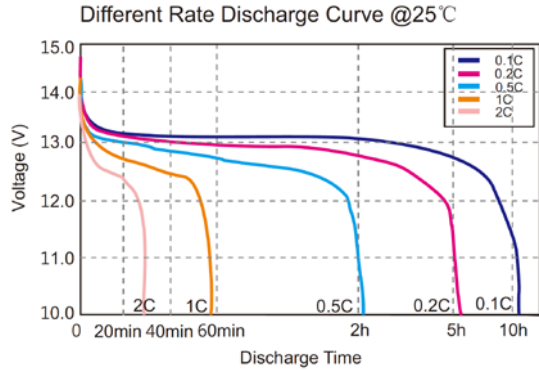


# PowerBrick+

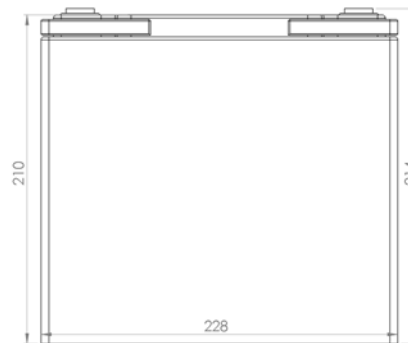
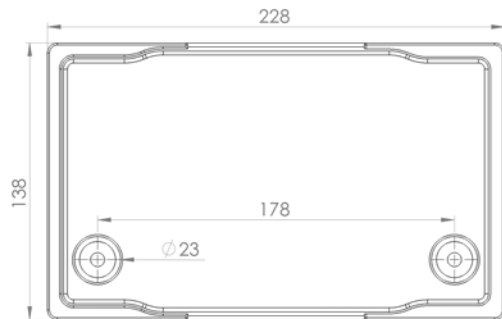
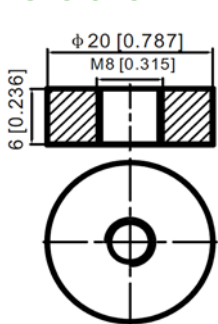
12v Lithium-Ion battery pack



## Charts and curves



## Dimensions



VI.5

PowerTech Systems SAS  
ZA Charles Renard - Batiment A1  
6 Bld Georges Guynemer  
78210 ST CYR L'ECOLE - France

SAS au capital de 1 000 000 Euros  
SIREN : 793926577 - TVA : FR33793926577

[www.powertechsystems.eu](http://www.powertechsystems.eu)  
+33 185 400 970  
[contact@powertechsystems.eu](mailto:contact@powertechsystems.eu)