



# Power Brick +

48v Lithium-Ion battery pack

# SHIP CONTROL

## 48V battery pack - Lithium Iron-Phosphate (LiFePO<sub>4</sub>) - 32Ah

- **High Service Life : 3000 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 **rare earths**, no **acid**, no **degassing**
- Calendar life > **10 years**
- Excellent **temperature** robustness (-20 °C up to +60 °C)
- **Flexible** deployment : up to 16 packs in parallel and 2 in series
- **Constant power** during discharge (very low internal resistance)
- **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	51.2 V
	Nominal capacity	32 Ah
	Stored energy	1638 Wh
	Internal resistance	≤ 50 mΩ
	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		16 A / 32 A
BMS charge cut-off voltage		59.2 V ± 0.4V
Standard Discharge	Instant peak discharge current	270 A ± 30 A (max 100mS)
	Continuous discharge current	65 A (3.33 kW)
	Maximum discharge current (< 30s)	100 A (5.12kW)
	BMS discharge cut-off voltage	40 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 : 260mm x W : 168mm x H : 212 mm
	Weight	13.2 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**
- **AGV, Robotics**
- ...

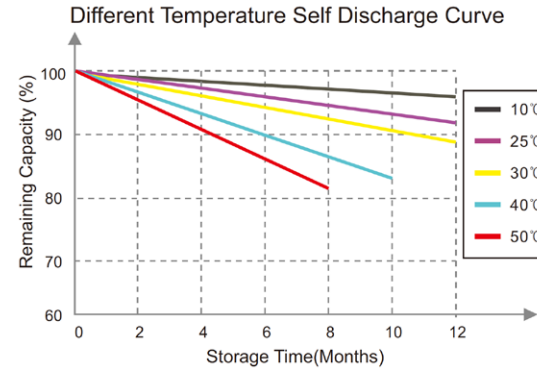
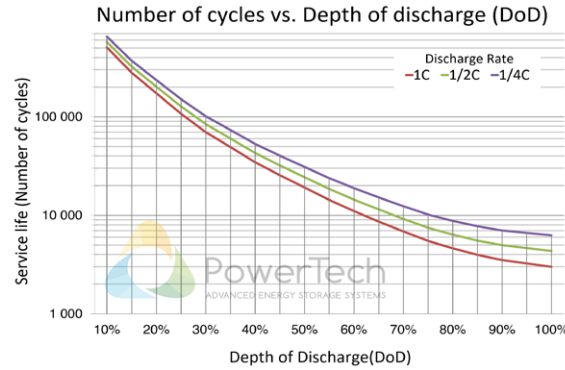
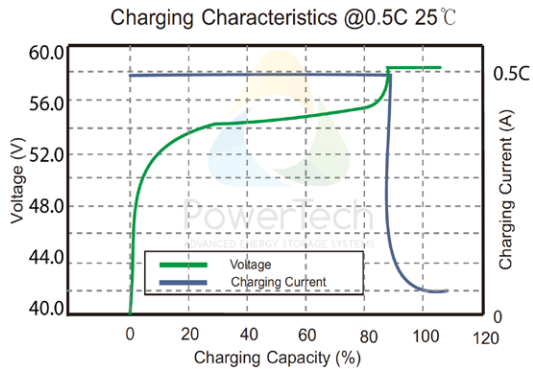
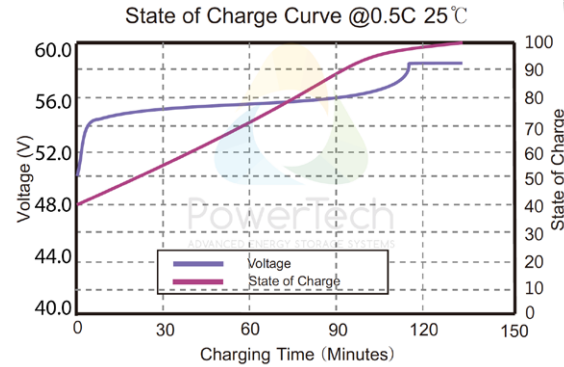
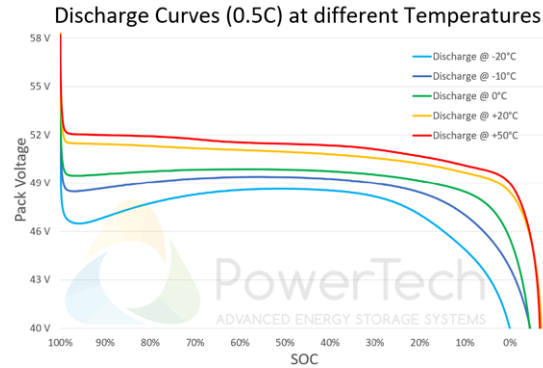
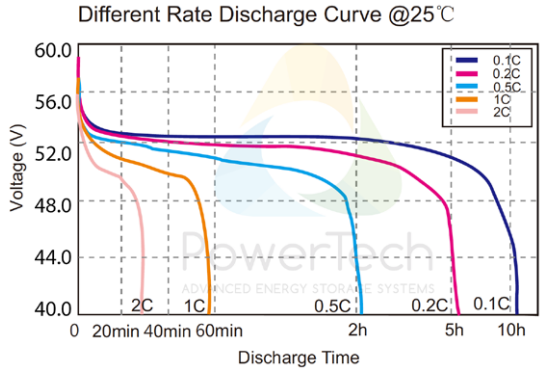


# PowerBrick+

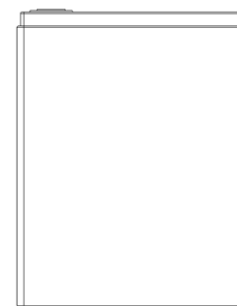
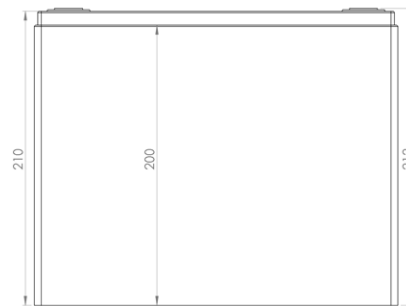
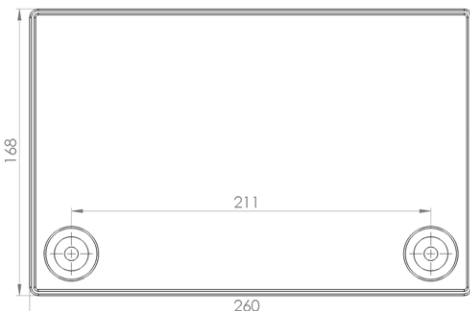
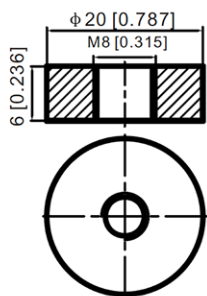
48v Lithium-Ion battery pack



## Charts and curves



## Dimensions



V1.4

SHIP CONTROL SRL  
Via dei Ghivizzani 1743b  
Loc. Piano di Mommio  
55054 Massarosa - LU

www.shipcontrolstore.it  
+39 0584 1660878  
info@shipcontrol.it