



# Power Brick Connect

Lithium-Ion battery

Solid State

24V-120Ah-SS-AB-CAN-H

## 24V Solid-State battery pack - LiFePO<sub>4</sub> - 120Ah - 3.07kWh

- **High lifespan: 4500 cycles** and more (see chart)
- **Communication by CAN Bus + RS 485** to retrieve all aggregated informations from battery pack (**up to 16 packs in parallel**)
- **Ultra safe Solid-State Lithium Iron Phosphate** chemistry (no thermal run-away, no fire or explosion risks)
- **Active Balancing** for fast, efficient cell voltage equalization
- **Fast recharge** in less than one hour
- **Embedded BMS** (Battery Management System) : **improve lifespan and safety of the battery**
- **Strict cell matching** for pack consistency. Laser cell welding
- **Cell heating system** for use in cold weather (down to -20°C)
- **Precharge system** for high capacitance loads
- No **Cobalt**, no **Manganèse**, no **Nickel**, no **rare earths**
- Calendar life > **10 years**
- Excellent **temperature** robustness (-20 °C up to +60 °C)
- **Constant power** during discharge (very low internal resistance)
- **Very low Peukert's losses** (energy efficiency >98 %)
- **Very low self discharge** (<3 % per month)
- **Deep discharge** allowed up to 100 %
- **No memory effect**
- About **50 % lighter** and **40% smaller** than equivalent Lead-AGM battery with same usable energy
- **Certification : CE, RoHS, UN 38.3, Cell : IEC 62619 - IEC 62620**



## Technical Specifications

Electric	Nominal voltage / Nominal capacity	25.6 V / 120Ah
	Stored energy	3072 Wh
	Volumetric energy density / Specific energy	137.0 Wh/L / 125.9 Wh/Kg
	Internal resistance	≤ 10mΩ
	Cycles	> 4500 cycles (see chart)
	Self discharge	< 3% per month
	Energy efficiency	> 98%
Standard Charge	Charge voltage	28.8 V ± 0.4 V (Optional floating voltage : 26.72V max)
	Charge mode	CC/CV : Constant Current / Constant Voltage
	Continuous charge current / Maximum charge current	130A / 150A
	BMS charge cut-off voltage	29.6 V ± 0.1V
Standard Discharge	Instant peak discharge current	800A (300 ms)
	Continuous discharge current	150A
	Maximum discharge current (< 30s)	200A
	BMS discharge cut-off voltage	20V
Environment	Charge temperature range	0°C to +55°C
	Discharge temperature range	-20°C to 60°C
	Storage conditions	0°C to +50°C @60±25% relative humidity
	IP protection level	IP65
Mechanical	Type of cells	Solid-State LiFePO <sub>4</sub> cells
	Casing material	ABS
	Dimensions	505x185x242 mm
	Weight	24.4 kg
	Terminal	M8 for power - IP67 M12 connector for CAN / RS485

## APPLICATIONS :

- Electrical vehicles and utilities
- Industrial carts and forklifts
- Marine applications
- Street lightning
- CCTV, IOT, standalone apps
- Robotics and AGVs
- Renewable energy storage

and much more...



PowerTech  
systems



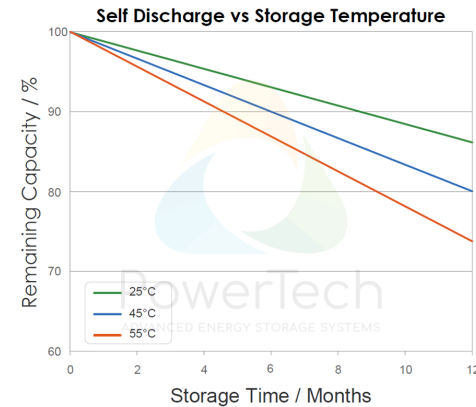
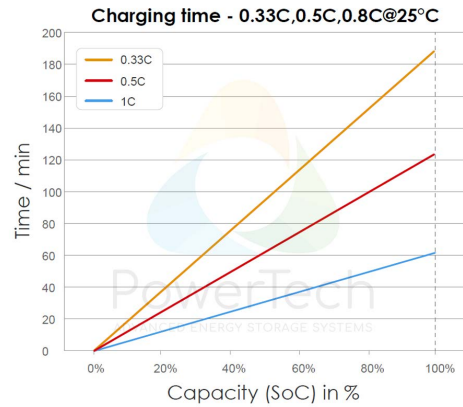
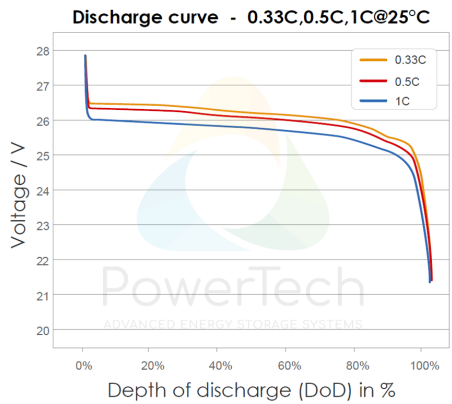
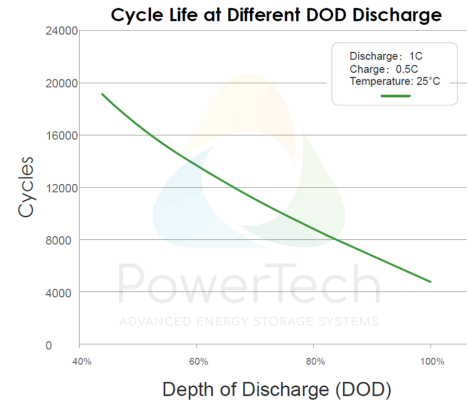
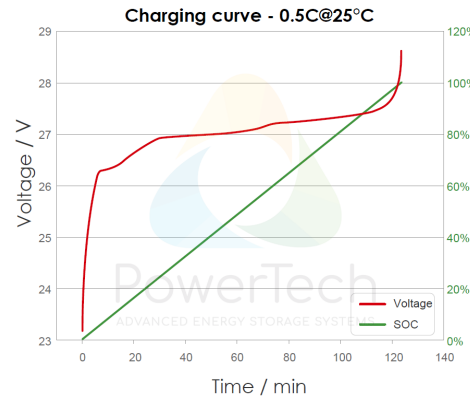
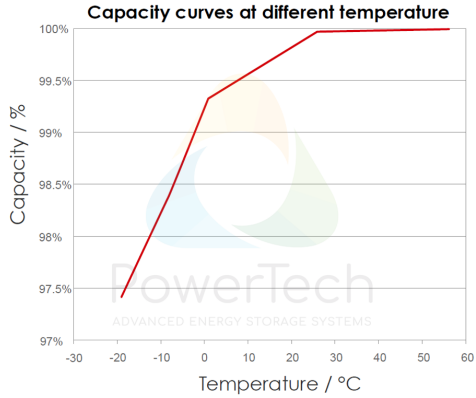
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Lithium-Ion battery

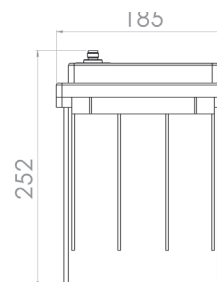
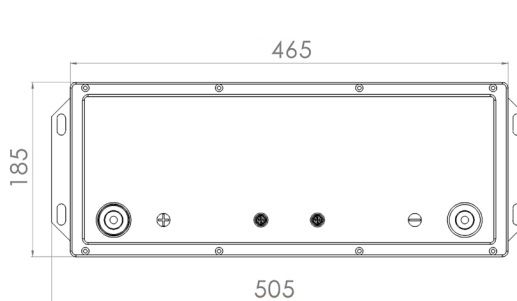
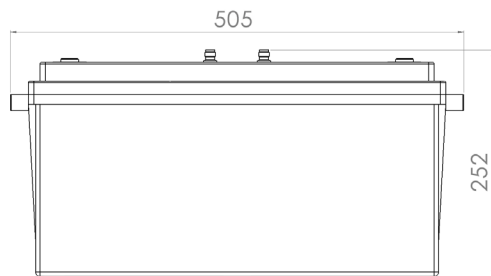
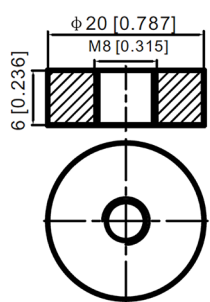
Solid State

12V-212Ah-SS-AB-CAN-H

## Charts and curves



## Dimensions



PowerTech systems

V1.6

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