Power Brick Smart

Lithium-Ion battery

Solid State

48V-53Ah-SS-AB-BT

48V Solid-State battery pack - LiFePO4 - 53Ah - 2.71kWh

- **High lifespan:** **4500 cycles** and more (see chart)
- **New Solid-State cell technology** for better performance and safety
- **Active Balancing** for fast, efficient cell voltage equalization
- **Remote monitoring by Bluetooth** (SOC, cell voltage, SOH, etc.)
- **Fast recharge** in less than one hour
- **Ultra safe Solid-State Lithium Iron Phosphate** chemistry (no thermal run-away, no fire or explosion risks)
- **Embedded BMS** (Battery Management System) **: improve lifespan and safety of the battery**
- **Strict cell matching** for pack consistancy. Laser cell welding
- **Precharge system** for high capacitance loads
- 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
- **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**



Technical Specifications

Electric	Nominal voltage / Nominal capacity	51.2 V / 53Ah
	Stored energy	2714 Wh
	Volumetric energy density / Specific energy	121.0 Wh/L / 127.4 Wh/Kg
	Internal resistance	≤ 10mΩ
	Cycles	> 4500 cycles (see chart)
	Self discharge	< 3% per month
	Energy efficiency	> 98%
Standard Charge	Charge voltage	57.6 V ± 0.8 V (Optional floating voltage : 53.44V max)
	Charge mode	CC/CV : Constant Current / Constant Voltage
	Continuous charge current / Maximum charge current	80A / 100A
	BMS charge cut-off voltage	59.2 V ± 0.4V
Standard Discharge	Instant peak discharge current	600A (300 ms)
	Continuous discharge current	100A
	Maximum discharge current (< 30s)	150A
	BMS discharge cut-off voltage	40V
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 LiFePO4 cells
	Casing material	ABS
	Dimensions	505x185x242 mm
	Weight	21.3 kg
	Terminal	M8

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...

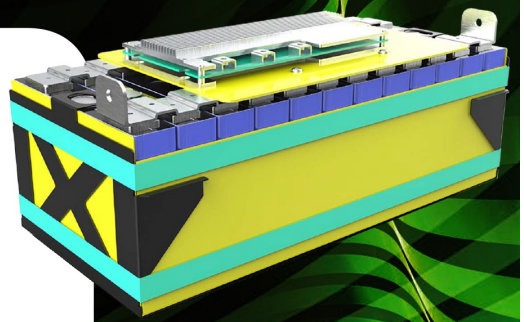
PowerTech systems

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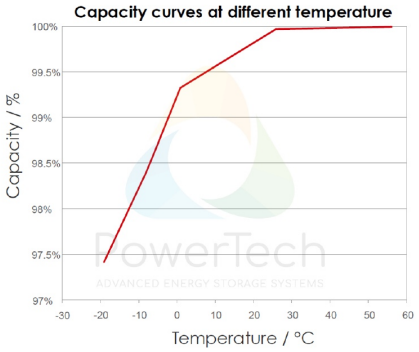
Lithium-Ion battery

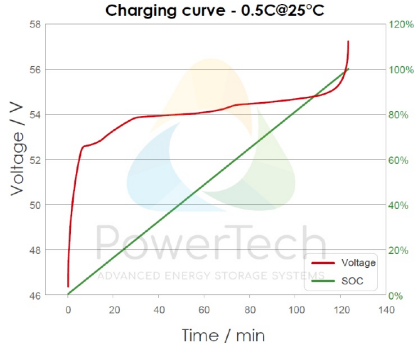
Solid State

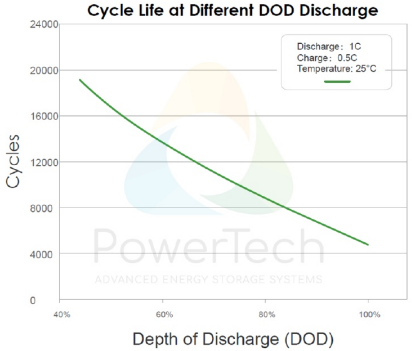
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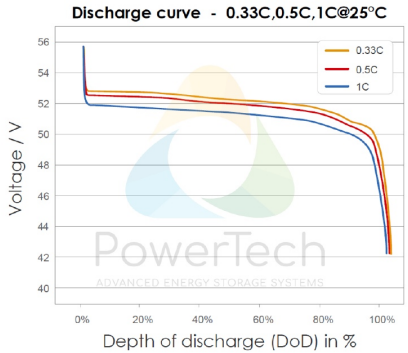


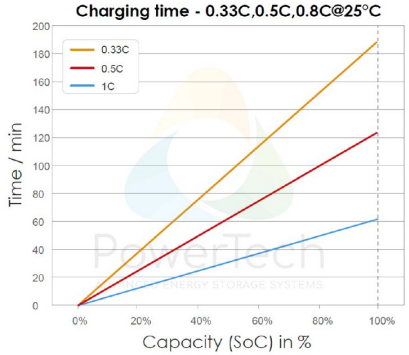
Charts and curves

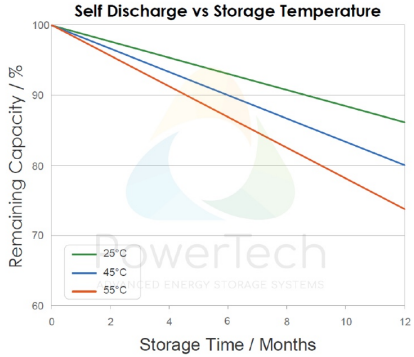














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Dimensions

