48v Lithium-Ion battery pack

48V battery pack - Lithium Iron-Phosphate (LiFePO4) - 72Ah

- 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)

Technical Specifications

- Flexible deployment : up to 16 packs in parallel and 4 in serial
- Constant power during discharge (very low internal resistance)
- Very low Peukert's losses (energy efficiency of 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

Electric	Nominal voltage	51.2 V
	Nominal capacity	72 Ah
	Stored energy	3.69 kWh
	Internal resistance	≤ 50 mΩ
	Cycles	>3000 cycles (see chart)
	Self discharge	< 3% per month
	Energy efficiency	98 %
Standard Charge	Charge voltage	$57.6 V \pm 0.8 V$
	Charge mode	CC/CV : Constant Current / Constant Voltage
	Continuous charge current / Maximum charge current	35 A / 70 A
	BMS charge cut-off voltage	$59.2 V \pm 0.4 V$
Standard Discharge	Instant peak discharge current	250±30 A (max 100mS)
	Continuous discharge current	90 A (4.61 kW)
	Maximum discharge current (< 30s)	130 A (6.57 kW)
	BMS discharge cut-off voltage	40V
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 66
Mechanical	Cell assembly	26650 - 16S19P
	Casing material	ABS
	Dimensions	L : 500mm (520mm) x P : 239mm x H : 217 mm
	Weight	31.2 kg
	Terminal	M8 bolt

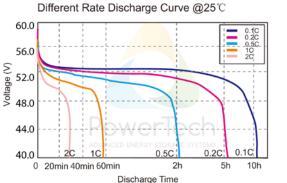


APPLICATIONS

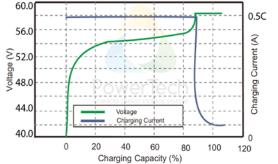
- Electrical vehicules and utilities
- Robotics and AGVs
- Solar and wind energy storage
- Marine
- Street lightning
- CCTV and security camera
- UPS, electric back-up
- Telecom
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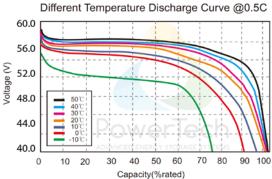
PowerBrick+ 48v Lithium-Ion battery pack

Charts and curves

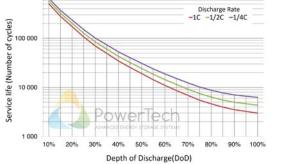


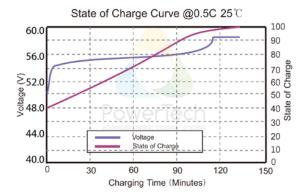




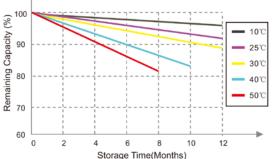




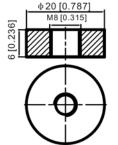


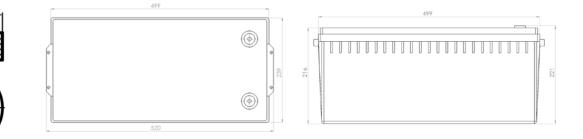


Different Temperature Self Discharge Curve



Dimensions









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