



Power Brick +

48v Lithium-Ion battery pack



48V battery pack - Lithium Iron-Phosphate (LiFePO₄) - 105Ah

- **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 4 in series
- **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

Technical Specifications

| | | |
|--------------------|--|---|
| Electric | Nominal voltage | 51.2 V |
| | Nominal capacity | 105 Ah |
| | Stored energy | 5.38 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 ± 0.8V |
| | Charge mode | CC/CV : Constant Current / Constant Voltage |
| | Continuous charge current / Maximum charge current | 50 A / 100 A |
| | BMS charge cut-off voltage | 59.2 V ± 0.4V |
| Standard Discharge | Instant peak discharge current | 500±50 A (max 280mS) |
| | Continuous discharge current | 120 A (6.14 kW) |
| | Maximum discharge current (< 30s) | 200 A (10.24 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 | 16S1P |
| | Casing material | ABS |
| | Dimensions | L : 500mm (520mm) x P : 239mm x H : 217 mm |
| | Weight | 37.5 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**
- ...

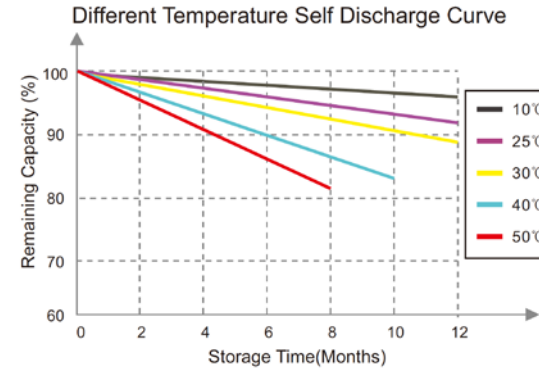
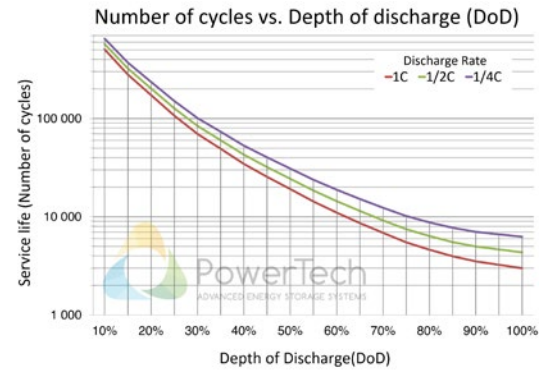
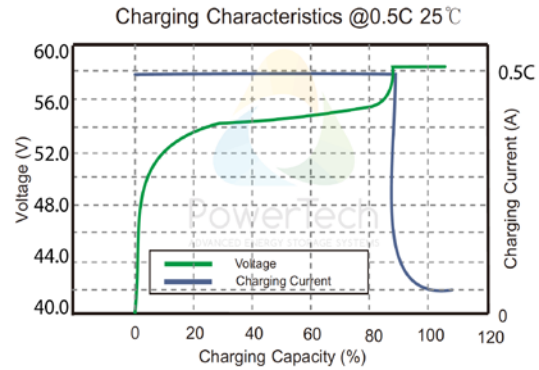
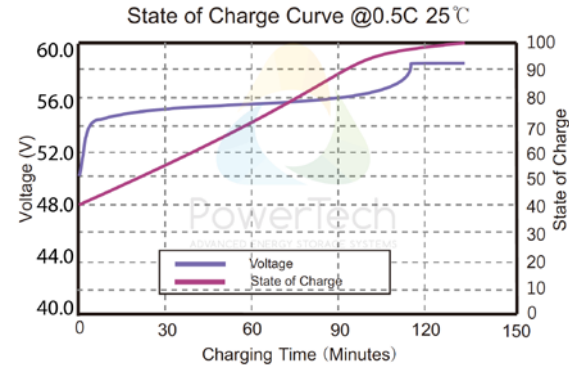
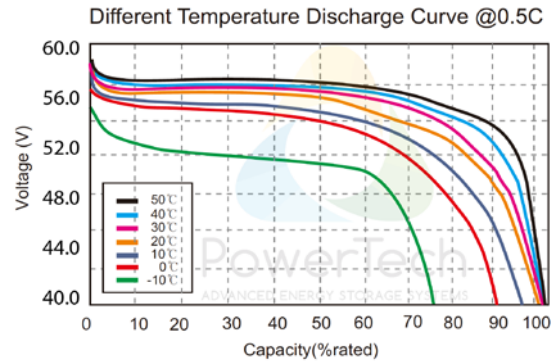
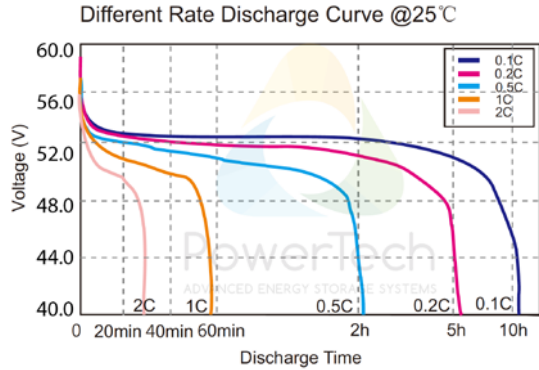


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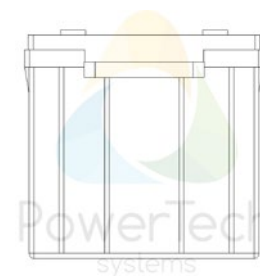
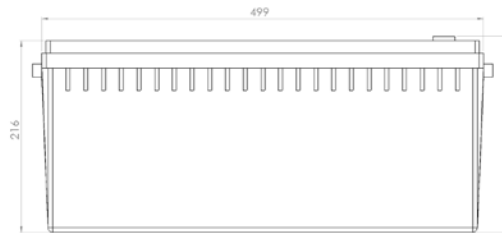
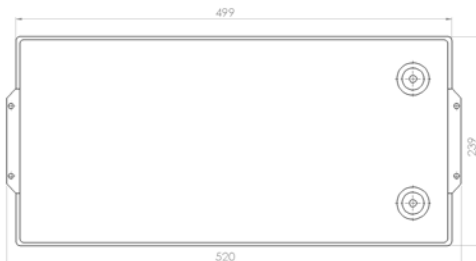
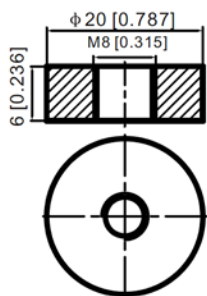
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Charts and curves



Dimensions



V1.3

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