



PowerBrick

12v Lithium-Ion battery pack



PowerTech
systems

12V battery pack - Lithium Iron-Phosphate (LiFePO₄) - 12Ah

- **High lifespan:** two thousand 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 **heavy metal**, no **toxic element**
- Calendar life > **10 years**
- Excellent **temperature** robustness (-20 °C up to +60 °C)
- **Flexible deployment** : up to **4 packs in parallel** and **4 in serial**
- **Constant power** during discharge (very low internal resistance)
- **Very low Peukert's losses** (energy efficiency >96 %)
- **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

Technical Specifications

| | | |
|--------------------|-----------------------------------|---|
| Electric | Nominal voltage | 12.8V |
| | Nominal capacity | 12 Ah |
| | Stored energy | 153.6 Wh |
| | Internal resistance | ≤ 50mΩ |
| | Cycles | >2000 cycles (see chart) |
| | Self discharge | < 3% per month |
| | Energy efficiency | > 96% |
| Standard Charge | Charge voltage | 14.4V ± 0.2V |
| | Charge mode | CC/CV : Constant Current / Constant Voltage |
| | Maximum continuous charge current | 6 A |
| | BMS charge cut-off voltage | 14.8V ± 0.1V |
| Standard Discharge | Continuous discharge current | 16 A (205 W) |
| | Maximum discharge current (< 30s) | 24 A (307 W) |
| | BMS discharge cut-off voltage | 10 V |
| Environment | Charge temperature range | 0°C à 45°C @60±25% relative humidity |
| | Discharge temperature range | -20°C à 60°C @60±25% relative humidity |
| | Storage temperature | 0°C à 40°C @60±25% relative humidity |
| | IP protection level | IP 55 |
| Mechanical | Cell assembly | 18650 - 458P |
| | Casing material | ABS |
| | Dimensions | L : 151mm x P : 98mm x H : 95 mm |
| | Weight | 1.55 kg |
| | Terminal | Clip Faston 6.35mm |



APPLICATIONS

- **Electrical vehicles and utilities**
- **Solar and wind energy storage**
- **Marine**
- **Street lightning**
- **CCTV and security camera**
- **UPS, electric back-up**
- **Telecom**
- **Medical equipments**
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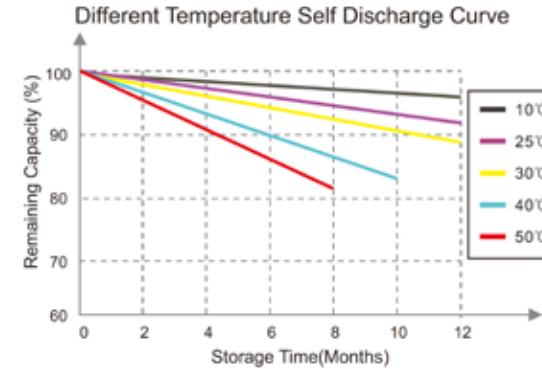
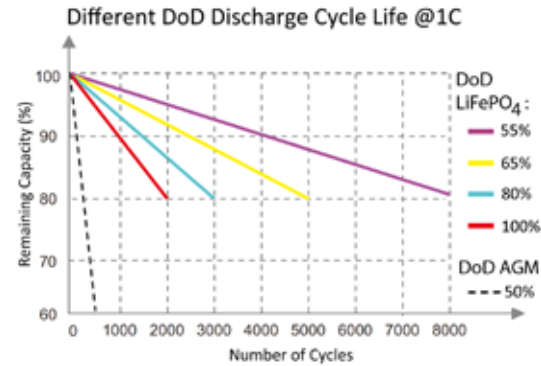
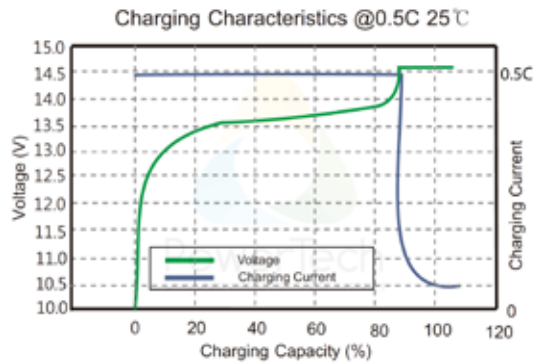
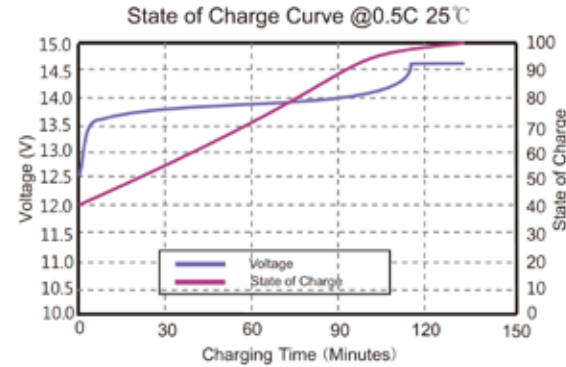
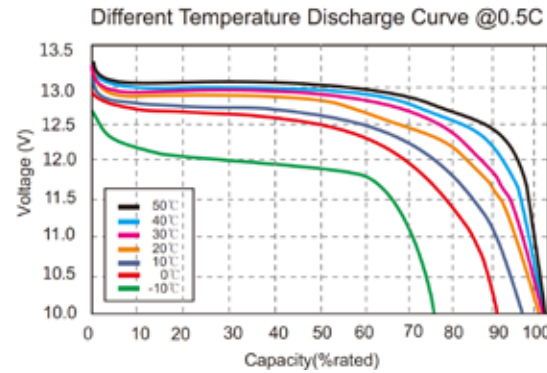
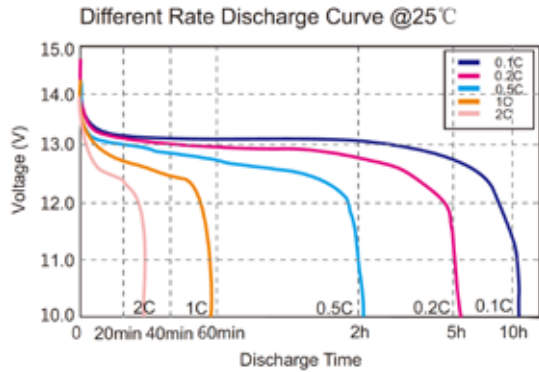


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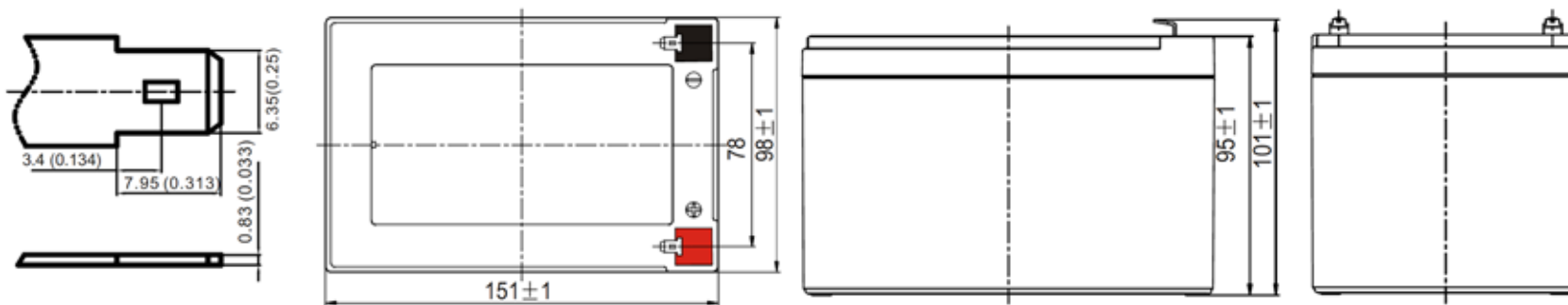
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Charts and curves



Dimensions



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v1.1

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