12LFP18TB

Rechargeable Lithium Iron Phosphate Battery

UN38.3 PASSED — TRANSPORT SAFETY CHECKED

Carry case and lead included
(T-Bar to Anderson plug)
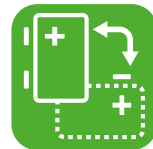
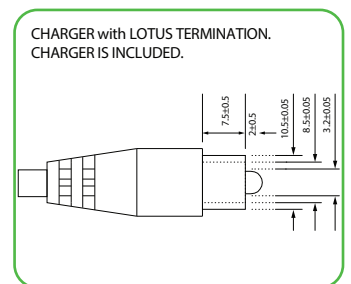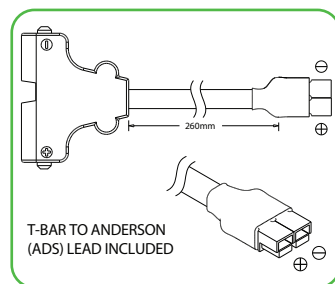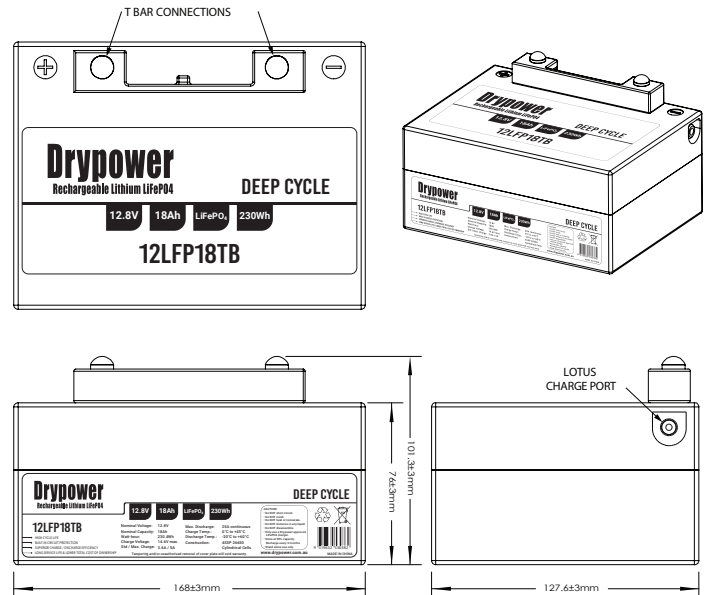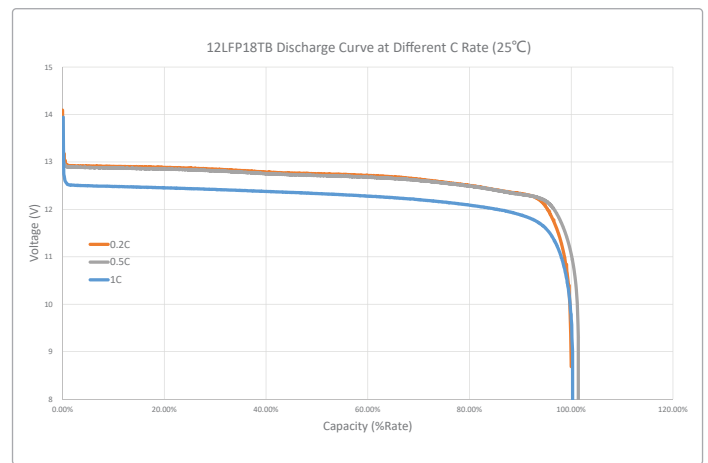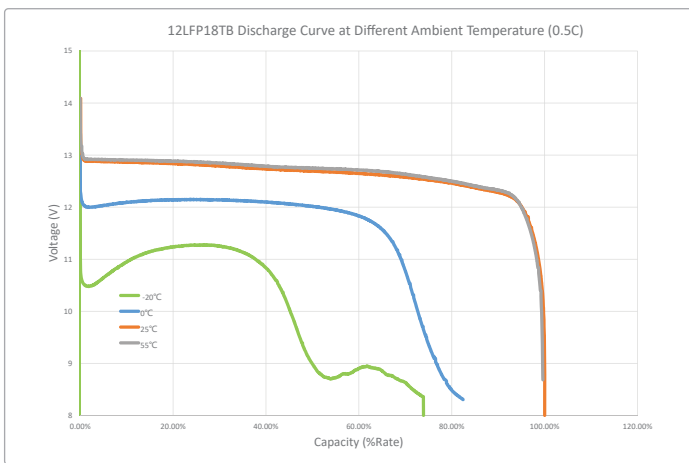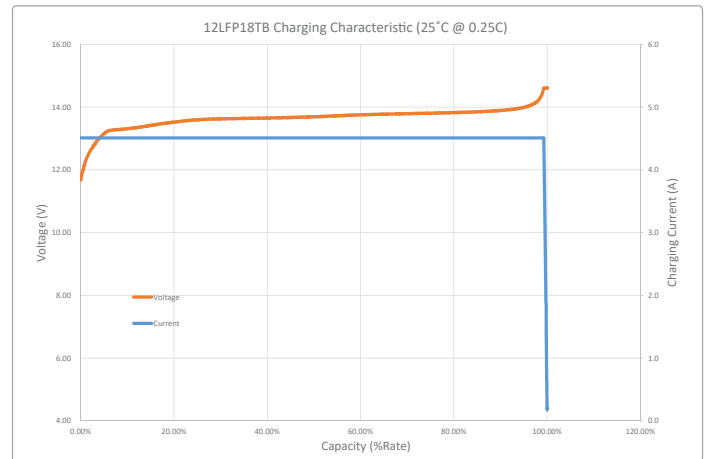**Any orientation** - Drypower Rechargeable Lithium batteries with cylindrical LiFePO4 cells inside can be used and mounted in any orientation, offering ultimate flexibility in a wide variety of applications.

SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity @5hr Rate	18Ah
Watt-hour	230.4Wh
Dimensions	
Length	168 ± 3mm
Width	127.6 ± 3mm
Height	76 ± 3mm
Overall Height	101.3 ± 3mm
Weight	2.5kg
Internal Resistance (at 1KHz)	≤60mΩ
Charge @25°C	
Standard Charge Current	3.6A
Maximum Charge Current	5A
Max Charge Voltage	14.6V
Discharge @25°C	
Standard Discharge Current	3.6A
Max. Continuous Discharge	25A
Cut-off Voltage	10V
Cell Used	IFR26650-36A
Assembly	4S5P-Cyl
Cycle Life (+0.25C/-0.5C, 25°C)	
100% DoD	≥2000 cycles
80% DoD	≥4000 cycles
50% DoD	≥5000 cycles
Operating Temperature	
Charge	0°C ~ +45°C
Discharge	−20°C ~ +60°C
Storage	−20°C ~ +45°C
Operating Humidity Range	5% – 85%
Case Material	ABS
Termination	T-Bar to ADS + Lotus Port
Ingress Protection Rating	IP54
Series Connection	Stand alone use only
Parallel Connection	No
Barcode	9319632530382

DIMENSIONS

T BAR CONNECTIONS

Drypower Rechargeable Lithium LiFePO4 — DEEP CYCLE
12.8V | 18Ah | LiFePO₄ | 230Wh
12LFP18TB

LOTUS CHARGE PORT

101.3±3mm

76±3mm

168±3mm

127.6±3mm

T-BAR TO ANDERSON (ADS) LEAD INCLUDED

260mm

CHARGER with LOTUS TERMINATION. CHARGER IS INCLUDED.

7.5±0.5 | 2±0.5 | 10.5±0.05 | 8.5±0.05 | 3.2±0.05

CHARACTERISTICS CHARTS

Cycle Life at Different DoD (0.25C+ / 0.5C-, 25°C)

12LFP18TB Charging Characteristic (25°C @ 0.25C)

12LFP18TB Discharge Curve at Different Ambient Temperature (0.5C)

12LFP18TB Discharge Curve at Different C Rate (25°C)
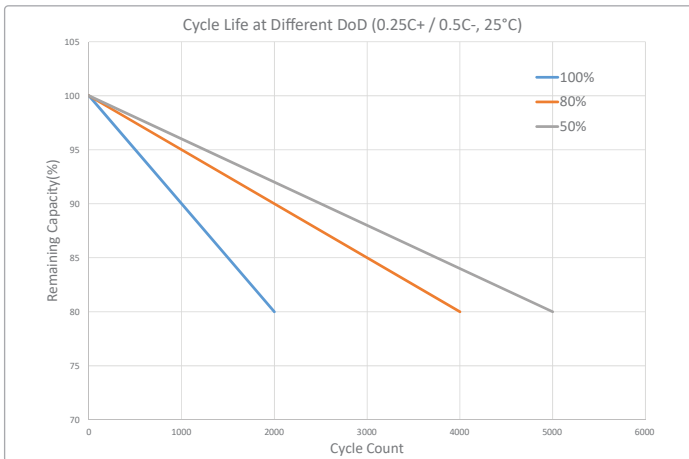
FEATURES & BENEFITS

Long Service Life
>2000 cycles @100% DoD (25°C) to 80% of original capacity - longer service life than SLA to reduce maintenance costs.

High Energy Density - More Power p/kg
Higher total system capacity and superior utilisation (full 100% DoD) to reduce overall system size and footprint.

Robust Enclosure
Enclosed in IP5x (dust resistant) or IP6x (dust tight) case with closed loop terminals - suitable for harsh environments.

Stable Chemistry & Built-in Circuit Protection
IEC & UN38.3 Safety Certified at cell level and integrated BMS protection to ensure safety and prevent damage.

Lightweight
Approx. 1/2 the weight (or less) of equivalent in SLA means lower logistics costs and minimal OH&S concerns.

Superior Charge & Discharge Efficiency
Faster charge/discharge rates (C/2 LiFePO4 vs C/20 SLA) for higher power usage and less downtime when charging.

Wide Operating Temperature Tolerance
Suitable for use in a wider range of applications where ambient temperature is atypical: from −20°C up to +60°C.

Fully Recyclable Battery
An environmentally friendly battery option, with no lead or calcium that can leak into the enviroment.

BUILT-IN PROTECTION

All Drypower Rechargeable Lithium batteries adhere to strict safety guidelines by incorporating Battery Management Systems (BMS) that include protection components such as:

- Integrated Circuit (IC)
- Thermistor
- MOSFET
- Protection Circuit Module (PCM)
- Fuse

The BMS in each Drypower battery helps to:
1. Maintain safety for users.
2. Prevent damage to equipment and property.
3. Eliminate concerns about use of the wrong type of charger.
4. Minimise the risk of overdischarge causing damage.
5. Provide short circuit and overcharge protection.

CAUTIONS

- Do NOT short circuit, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Do NOT allow the battery to become overdischarged. If possible, isolate the battery when not in use.
- Do NOT leave the battery in a discharged state. Always recharge after use with a Drypower approved LiFePO4 charger.
- Store at 50% capacity. Recharge every 3 months. The storage area should be clean, cool, dry and ventilated.
- Stand alone use only. No parallel connection allowed.