Drypower

| 12.8V | 150Ah | LiFePO₄ | 1920Wh |

12LFP150P

Rechargeable Lithium Iron Phosphate Battery

SPECIFICATIONS

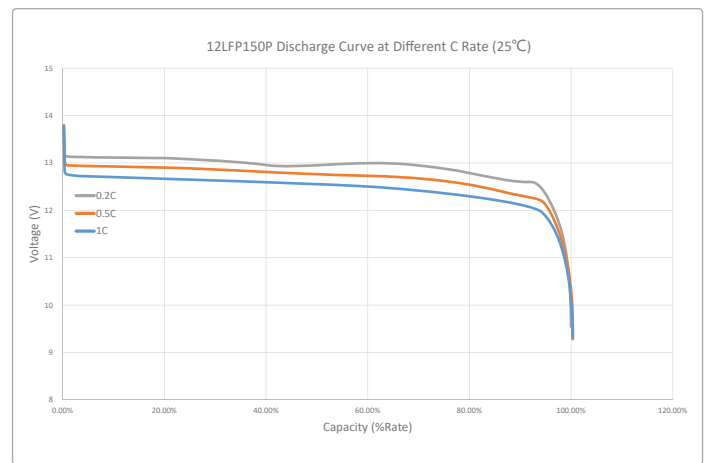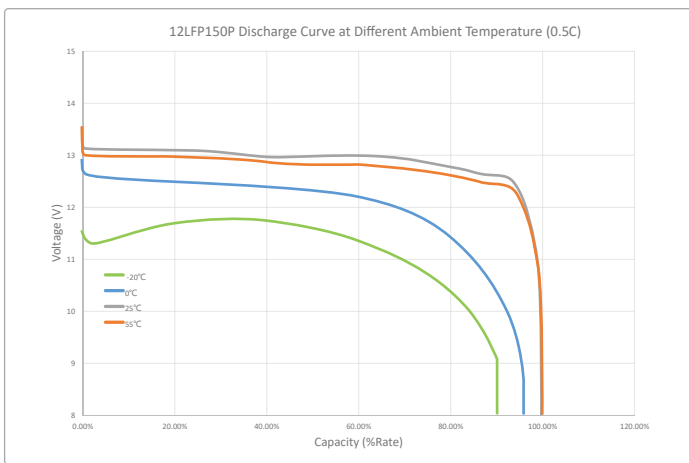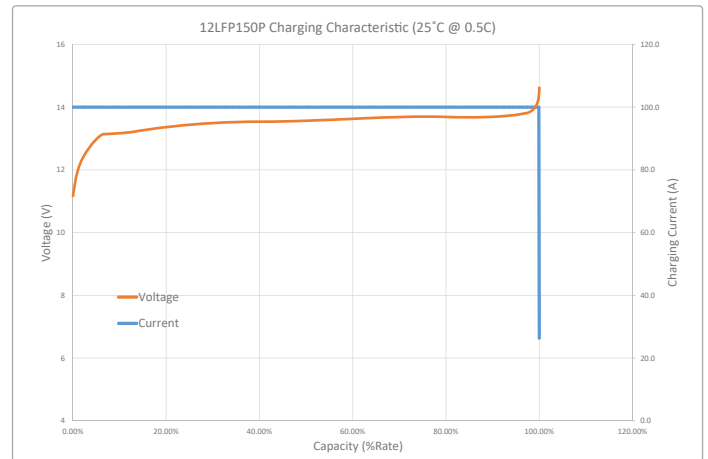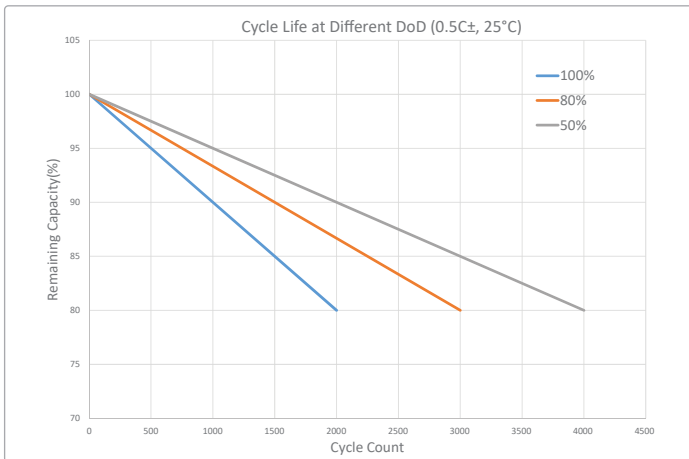|	
Nominal Voltage	12.8V
Nominal Capacity @5hr Rate	150Ah
Watt-hour	1920Wh
Dimensions	
Length	520 ± 3mm
Width	240 ± 2mm
Height	220 ± 2mm
Overall Height	223 ± 3mm
Weight	18.7kg
Internal Resistance (at 1KHz)	≤70mΩ
Charge @25°C	
Standard Charge Current	30A (0.2C)
Maximum Charge Current	150A (1C)
Max Charge Voltage	14.6V
Discharge @25°C	
Standard Discharge Current	30A (0.2C)
Max. Continuous Discharge	150A (1C)
Cut-off Voltage	10V
Cell Used	IFP23140160
Assembly	4S3P-Pris
Cycle Life (±0.5C, 25°C)	
100% DoD	≥2000 cycles
80% DoD	≥3000 cycles
50% DoD	≥4000 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	F18 (M8 Bolt)
Ingress Rating	IP64
Series Connection	Up to 4S
Parallel Connection	No
Barcode	9319632530498

Upright orientation only - Drypower Rechargeable Lithium batteries with prismatic LiFePO4 cells inside should only be used and mounted in an upright position for the best service life.

DIMENSIONS

(M8 Bolt)
F18

520±3mm
497.8±2mm
240±2mm

220±2mm
223.3mm
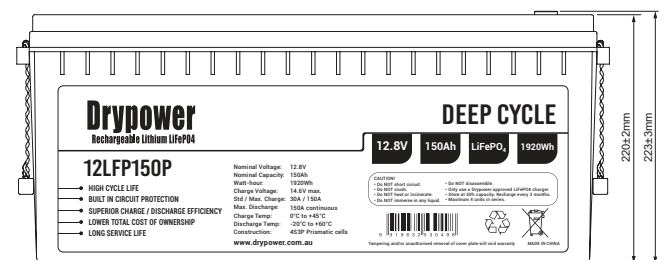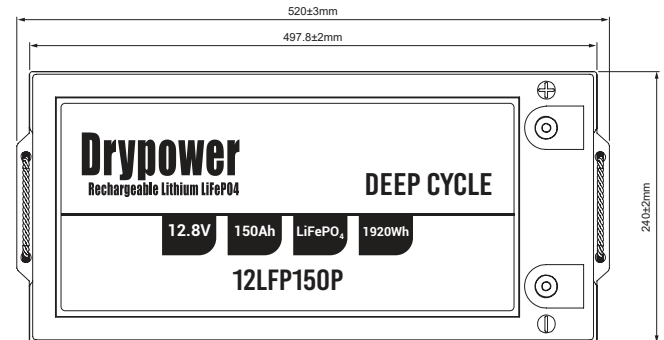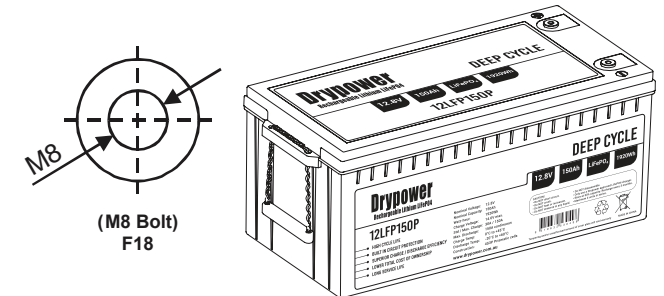
CHARACTERISTICS CHARTS

Cycle Life at Different DoD (0.5C±, 25°C)

12LFP150P Charging Characteristic (25°C @ 0.5C)

12LFP150P Discharge Curve at Different Ambient Temperature (0.5C)

12LFP150P 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.
- Maximum 4 units in series. No parallel connection allowed.