Drypower

LITHIUM IRON PHOSPHATE LiFePO4 RANGE

RECHARGEABLE LITHIUM

12.8V | 121.6Ah | $LiFePO_4$ | 1556Wh

12LFP122

Rechargeable Lithium Iron Phosphate Battery

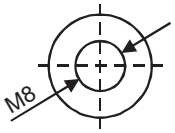
SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity @5hr Rate	121.6Ah
Watt-hour	1556.48Wh
Weight	14.36kg
Internal Resistance (at 1KHz)	≤60mΩ
Charge @25°C	
Standard Charge Current	24A
Maximum Charge Current	80A
Max Charge Voltage	14.6V
Discharge @25°C	
Standard Discharge Current	24A
Max. Continuous Discharge	80A
Cut-off Voltage	10V
Cell Used	IFR26650-38A
Assembly	4S32P-Cyl
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 Protection Rating	IP64
Series Connection	Up to 4S
Parallel Connection	No
Barcode	9319632530597

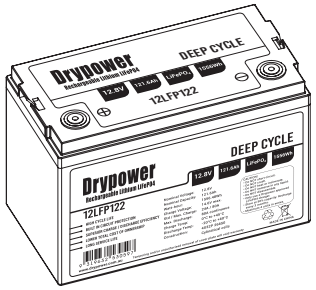
UN38.3 PASSED
TRANSPORT SAFETY CHECKED

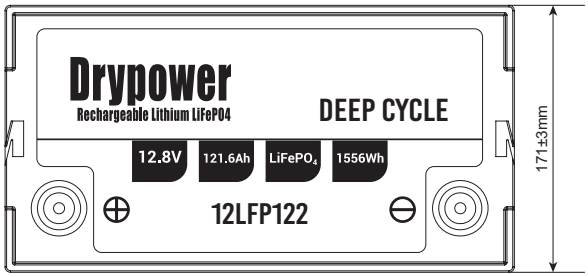
Any orientation - Drypower Rechargeable Lithium batteries with cylindrical LiFePO4 cells inside can be used and mounted in any orientation, offering ultimate flexibility in a wide variety of applications.

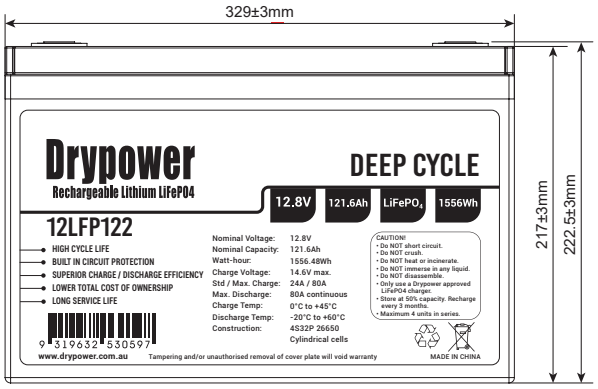
DIMENSIONS



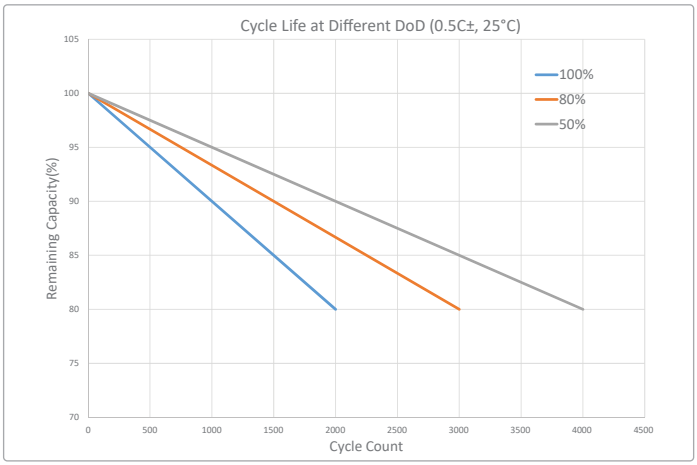
(M8 Bolt)
F18

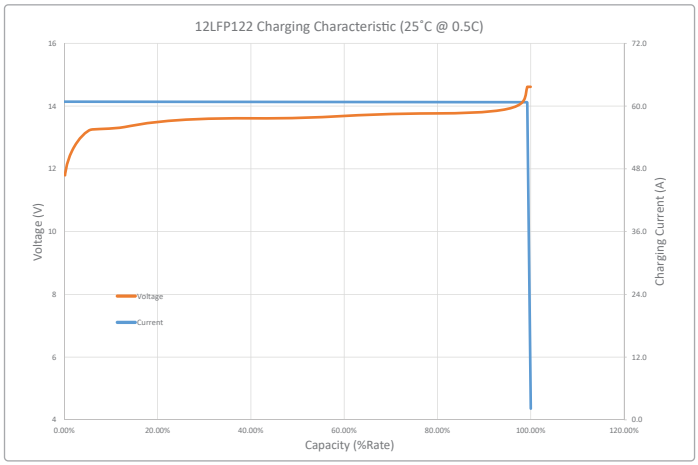


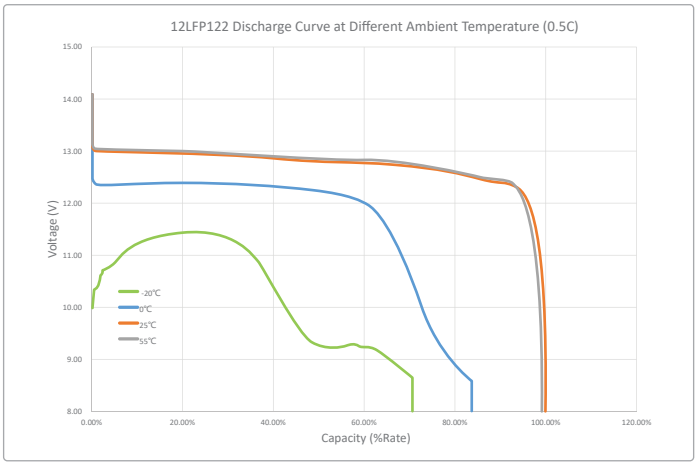


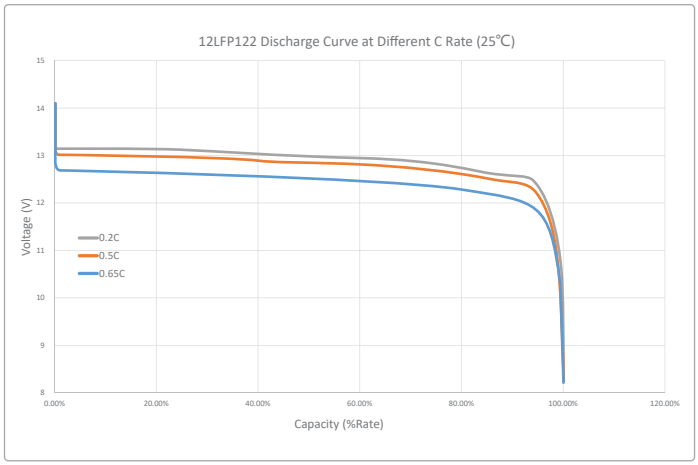


CHARACTERISTICS CHARTS









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

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.

Performance may vary depending on application. All specifications are correct at time of creation. All specifications and operation conditions contained in this datasheet are subject to change or improvement without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us ▪ Oct2020