Drypower

LITHIUM IRON PHOSPHATE LIFePO4 RANGE

150Ah



12LFP150PS

Rechargeable Lithium Iron Phosphate Battery

SPECIFICATIONS	
Nominal Voltage	12.8V
Nominal Capacity @5hr Rate	150Ah
Watt-hour	1920Wh
Weight	16.6kg
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 Protection Rating	IP64
Series Connection	Up to 4S
Parallel Connection	Up to 2P *refer to installation instructions
Barcode	9319632530610





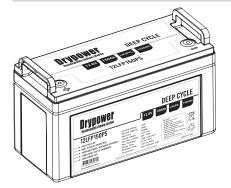
Upright orientation only - Drypower Rechargeable Lithium batteries with prismatic LiFePO4 cells inside should only be used and mounted in an upright position for the best service life.

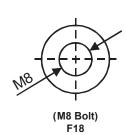
LiFePO₄

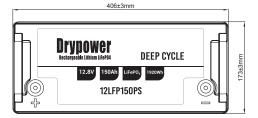
1920Wh

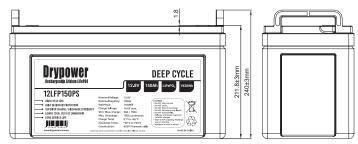
8.3 PASSE

DIMENSIONS

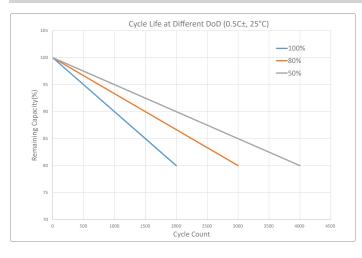


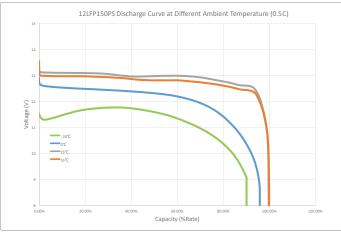






CHARACTERISTICS CHARTS





FEATURES & BENEFITS



Long Service Life

Robust Enclosure

Lightweight

>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.

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.

KG

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





Wide Operating Temperature Tolerance Suitable for use in a wider range of applications where

Superior Charge & Discharge Efficiency

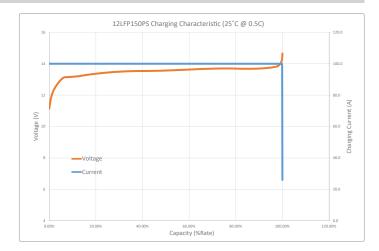
ambient temperature is atypical: from -20°C up to +60°C.

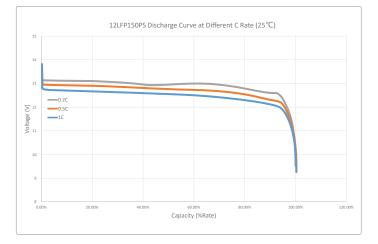
Faster charge/discharge rates (C/2 LiFePO4 vs C/20 SLA)

for higher power usage and less downtime when charging.

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
- 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 • Jan2024

 Thermistor Protection Circuit Module (PCM)