7.6Ah

LITHIUM IRON PHOSPHATE LIFePO4 RANGE



RECHARGEA

# 6LFP7.6

**Rechargeable Lithium Iron Phosphate Battery** 

SPECIFICATIONS	
Nominal Voltage	6.4V
Nominal Capacity @5hr Rate	7.6Ah
Watt-hour	48.64Wh
Dimensions	
Length Width Height Overall Height	150 ± 3mm 35 ± 2mm 93 ± 2mm 101.2 ± 3mm
Weight	0.4kg
Internal Resistance (at 1KHz)	≤90mΩ
Charge @25°C	
Standard Charge Current Maximum Charge Current Max Charge Voltage	1.52A (0.2C) 7.6A (1C) 7.3V
Discharge @25°C	
Standard Discharge Current Max. Continuous Discharge Cut-off Voltage	1.52A (0.2C) 8A 5.0V
Cell Used	IFR26650-38A
Assembly	2S2P-Cyl
<b>Cycle Life</b> (±0.5C, 25°C) 100% DoD 80% DoD 50% DoD	≥2000 cycles ≥3000 cycles ≥4000 cycles
Operating Temperature	
Charge Discharge Storage	0°C ~ +45°C –20°C ~ +60°C –20°C ~ +45°C
Operating Humidity Range	5% – 85%
Case Material	ABS
Termination	F1 (Faston 187)
Ingress Protection Rating	IP65
Series Connection	Up to 4S
Parallel Connection	No
Barcode	9319632530504



48.64Wh

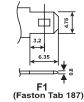
LiFeP0<sub>4</sub>

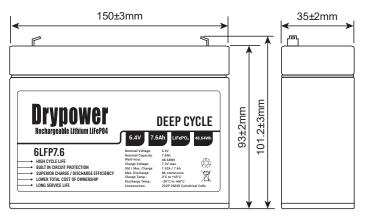


Any orientation - Drypower Rechargeable Lithium batteries with cylindrical LiFePO4 cells inside can be used and mounted in any orientation, offering ultimate flexibility in a wide variety of applications.

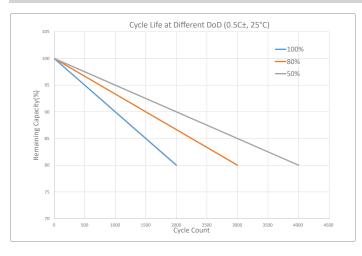
# DIMENSIONS

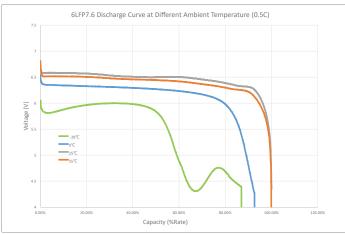






# **CHARACTERISTICS CHARTS**





# **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

Superior Charge & Discharge Efficiency

IEC & UN38.3 Safety Certified at cell level and integrated BMS protection to ensure safety and prevent damage.



BMS

### Lightweight

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

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

for higher power usage and less downtime when charging.

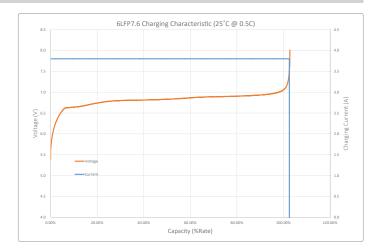


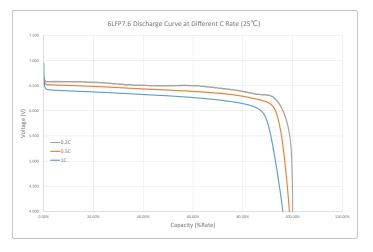


Wide Operating Temperature Tolerance Suitable for use in a wider range of applications where ambient temperature is atypical: from -20°C up to +60°C.

#### **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:

Protection Circuit Module (PCM)

- Integrated Circuit (IC) Thermistor
- 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 • Oct2020