# Drypower

LITHIUM IRON PHOSPHATE LIFePO4 RANGE

121.6A

12.8V

# 12LFP122

**Rechargeable Lithium Iron Phosphate Battery** 

SPECIFICATIONS		
Nominal Voltage	12.8V	
Nominal Capacity @5hr Rate	121.6Ah	
Watt-hour	1556.48Wh	
Dimensions		
Length Width Height Overall Height	329 ± 3mm 171 ± 3mm 217 ± 3mm 222.5 ± 3mm	
Weight	14.36kg	
Internal Resistance (at 1KHz)	≤60mΩ	
Charge @25°C Standard Charge Current Maximum Charge Current Max Charge Voltage Discharge @25°C	24A 80A 14.6V	
Standard Discharge Current Max. Continuous Discharge Cut-off Voltage	24A 80A 10V	
Cell Used	IFR26650-38A	
Assembly Cycle Life (±0.5C, 25°C) 100% DoD 80% DoD 50% DoD	4S32P-Cyl ≥2000 cycles ≥3000 cycles ≥4000 cycles	
Operating Temperature	_ 1000 0y0100	
Charge Discharge Storage	0°C ~ +45°C −20°C ~ +60°C −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	9319632530597	



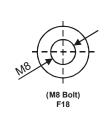
LiFePO<sub>4</sub>

1556Wh

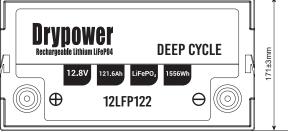
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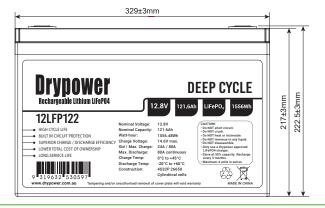
**Any orientation** - Drypower Rechargeable Lithium batteries with cylindrical LiFePO4 cells inside can be used and mounted in any orientation, offering ultimate flexibility in a wide variety of applications.

# DIMENSIONS

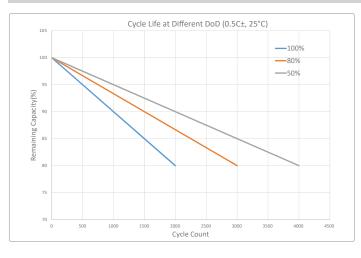


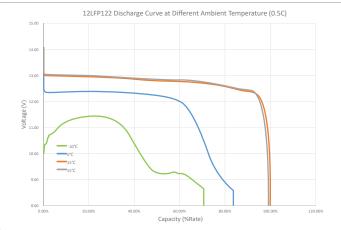






# **CHARACTERISTICS CHARTS**





# **FEATURES & BENEFITS**



## Long Service Life

**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.

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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)





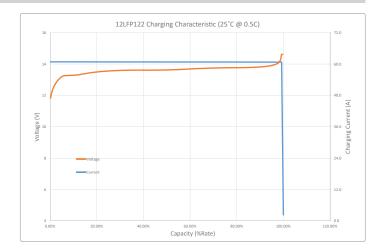
for higher power usage and less downtime when charging. Wide Operating Temperature Tolerance Suitable for use in a wider range of applications where

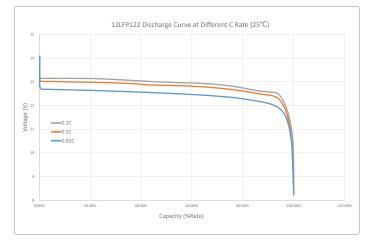
Superior Charge & Discharge Efficiency

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