



DRIFTECO

LIFEPO4 LEISURE BATTERY

DRIFT ECO 305 QUICK SPECS

- LiFePO4 Lithium
- 305 Ah
- 12V
- 4000 Cycles
- 250A Discharge
- 3904 Watts
- IP65 Rated

FULL SPECIFICATIONS

CELL INFORMATION	
Cell Type	ESS 72173207-305A
Cell Configuration	4S1P
Nominal Capacity	305Ah
Energy	3904Wh
Cell Chemistry	Lithium Iron Phosphate
Cell Nominal Voltage	3.2V *4 (12.8V)
Cycle Life	4000 @ 80% DOD
Maximum Discharge	1C (250A)
Maximum Charge	250A
Nominal Voltage	12.8V
Discharge Cut Off Voltage	10V
Discharge Temperature Range	-20C to 60C
Charge Temperature Range	0C to 60C
Storage	10C to 35C @ 50% SOC
Measurements (LxWxH in mm)	380mm x 190mm x 245mm
Weight	28KG
Housing Material	ABS Plastic
Conformity	UN38.3, ROHS, CE, UL

BMS INFORMATION	
Maximum Discharge	250A
Temperature Protection	Yes
OverCurrent Protection	Yes
OverDischarge Protection	Yes
Max Charging Current	250A



Storing your Battery

We strongly suggest your batteries are stored at room temperature, charged to about 30% to 50% of capacity.

We recommend that batteries be charged once every three months to prevent over discharge.

Battery Performance

Because Lithium Iron Phosphate batteries utilise a chemical reaction, battery performance will deteriorate over time even if stored for long periods of time without being regularly used.

In addition, if the various usage conditions such as charge, discharge, ambient temperature, etc. are not maintained within the specified ranges, the life expectancy of the battery may be shortened, or the device in which the battery is used may be damaged by electrolyte leakage.

If the batteries cannot maintain a charge for long periods of time, even when they are charged correctly, this may indicate it is time to change the battery.

Battery Safety

- Do not disassemble your battery.
- Do not short the battery.
- Do not store your batteries in direct sunlight.
- Store the battery in a cool and well ventilated area.
- Keep batteries away from flammable objects and materials.
- Never leave a battery unattended whilst charging.
- Keep batteries away from static electric charges.
- Keep out of reach from animals and children.
- Do not immerse your battery in water.
- Do not crush, incinerate or modify your battery.
- Only use batteries within the manufacturers specifications.
- Recycle your batteries correctly.

Battery Series and Parallel Mode

All 12V batteries can be connected either four (4) in series OR sixteen (16) in parallel.

Charging

Your battery should be charged using a lithium iron phosphate battery charger.

Bulk Charge : 14.2V - 14.4V

Float Charge : 13.5V - 13.8V

Charging Current : up to 250A

Battery Warranty

- Fogstar offers a 6 year warranty on all Fogstar Drift ECO Leisure batteries.
- Warranties only apply to the original owner and are non-transferrable.
- Fogstar will verify your purchase prior to processing any warranty claims or returns.
- Please contact us at customerservice@fogstar.co.uk as soon as you encounter any issues.
- Our warranty does not cover items that have been damaged due to gross negligence, normal wear and tear, damage due to accident or collision, abuse or incorrect installation.

Temperature Considerations

- Charging: This battery does not contain an internal heating element for low-temperature operation. To ensure optimal battery health and lifespan, avoid charging the battery below 0°C (32°F).
- Discharging: The Drift ECO battery performs well in cold environments, with a discharge temperature range down to -20°C (-4°F).
- JBD BMS Protection: Even though charging at low temperatures is not recommended, the integrated JBD BMS safeguards the battery by preventing charging if the temperature falls below the safe operating range. This BMS protection ensures the battery is not damaged by accidental charging in cold conditions.

Battery Monitoring

The Drift ECO battery prioritises reliability and longevity over Bluetooth connectivity. While it doesn't have built-in Bluetooth, you can effectively monitor its state of charge (SOC) using two reliable methods:

- Battery Shunt: This is a hardware device installed in-line with the battery cables. It measures current flow and calculates the remaining capacity based on the charged and discharged amp-hours. Shunts are a simple and accurate way to track SOC.
- Battery Monitor: This is a dedicated display unit that provides a user-friendly interface to view various battery parameters like SOC, voltage, current, temperature, and cycle count. Battery monitors offer a more comprehensive overview of the battery's health.