

# EXPION360®



## LITHIUM IRON PHOSPHATE BATTERY DATA SHEET EX-G24-95XDP (12.8 Vdc/96 Ah)

**PERFORMANCE:** Long Cycle Life  
High Energy Density  
High Discharge Current  
Fast Charging  
Maintenance Free  
Low Weight

**FEATURES:** Certified compliant to UL 1973 with grade A UL Recognized cells  
360-degree mounting with tie-down system accessories  
Integrated Battery Management System (BMS) for safety and reliability  
Oversized terminal connection pads  
Premium fiberglass reinforced ABS plastic case

| Electrical Parameters    |                               |
|--------------------------|-------------------------------|
| Nominal Voltage          | 12.8 Vdc                      |
| Rated Capacity           | 96 Ah                         |
| Energy                   | 1228 Wh                       |
| Resistance               | <5 mΩ                         |
| Efficiency               | >99 %                         |
| Cycle Life               | >3500 cycles at 1C, 100 % DoD |
| Cell Self-Discharge      | <2 % per month                |
| Cells in Series/Parallel | 4S/24P                        |

| Discharge Parameters          |                  |
|-------------------------------|------------------|
| Continuous Discharge Current  | 60 A             |
| Max. Discharge Current        | 95 A             |
| Pulse Discharge Current       | 120 A (1 s)      |
| Recommended Volt. Disconnect  | 10.5 Vdc         |
| BMS Discharge Cut-off Voltage | 9.2 Vdc          |
| Short Circuit Protection      | 200 μs to 600 μs |

| Compliance     |  |
|----------------|--|
| Certifications | UL 1642 For Cells, File no. MH64383                                    |
|                | UN3480, Class 9, UN38.3  |
|                | Certified compliant to UL 1973 by TEI Listing Services, File no. 22D01 |

| Mechanical Parameters       |                                    |
|-----------------------------|------------------------------------|
| Dimensions                  | 10.2 in x 6.8 in x 8.6 in          |
|                             | (260 mm x 173 mm x 218 mm)         |
| Weight                      | 25 lb (11.4 kg)                    |
| Terminal Thread             | M 8 x 1.25                         |
| Battery Housing             | ABS Plastic Case                   |
| Housing Protection          | IP66                               |
| Housing Flammability Rating | UL-94 V-0                          |
| Cell Type (Chemistry)       | Cylindrical (LiFePO <sub>4</sub> ) |

| Charge Parameters          |          |
|----------------------------|----------|
| Charge Method              | CC-CV    |
| Recommended Charge Voltage | 14.6 Vdc |
| Recommended Float Voltage  | 13.6 Vdc |
| Recommended Charge Current | 25 A     |
| Maximum Charge Current     | 45 A     |
| BMS Charge Cut-off Voltage | 14.6 Vdc |

| Temperature Parameters |                                   |
|------------------------|-----------------------------------|
| Discharge Temperature  | -4 °F to 140 °F (-20 °C to 60 °C) |
| Charge Temperature     | 32 °F to 140 °F (0 °C to 60 °C)   |
| Storage Temperature    | 32 °F to 95 °F (0 °C to 35 °C)    |

**NOTE:** Do not mix with lead-acid batteries when recycling. See Expion360, Inc. user's manual for proper operation.

**DISCLAIMER:** While every precaution has been taken to ensure the accuracy of the contents within this document, Expion360, Inc. assumes no responsibility for errors or omissions. Specifications and product functionality may change without notice.

**STORAGE:** One discharge-recharge cycle every 6 months.



**UL**  
UL 1642 For Cells Only  
#MH64383

**UN**  
**38.3**