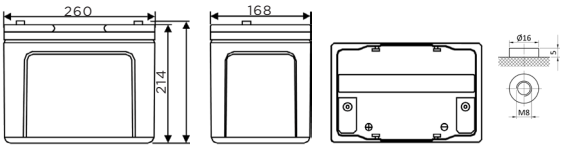
12 EL 80

BATTERY SPECIFICATIONS

ENLiFEN Lithium PO4 12V80Ah

Valen ENLiFEN is a Lithium Phosphate (LiFEPO4) battery. Having a Battery Management System (BMS) allows the ENLiFEN battery to safely perform to your requirements without the fear of thermal runaway and explosion. The BMS also equalises all battery cells ensuring longevity. Being fully sealed, the Valen ENLiFEN does not require special ventilation. Customisation ensures the Valen ENLiFEN is able to be retrofitted into a range of areas that are space restrictive. Valen ENLiFEN battery is constructed utilising individual 3.2V3200mAh battery cells in series and parallel. Charge and discharge parameters are determined by the inbuilt BMS in accordance with system requirements for maximum benefits. Thanks to its flexibility, BMS and proven ability to withstand high temperatures, the Valen ENLiFEN battery is the battery of choice for remote, space restrictive and hot environments such as monitoring equipment and signage.



Specifications

Voltage	12 Volt nominal
Capacity	80Ah
Minimum Capacity	77Ah
Chemistry	Lithium Iron Phosphate (LiFEPO4)
Dimensions	260(L) x 168(W) x 214(H)
Weight	9.5kg
Terminal	M8
Container/Cover	ABS
Cycles	4000 at 80% DOD
Charging End Voltage	14.4V
Standard Charge	Constant Current: 25A Charge Time: approx. 4 hours
Standard Discharge	Constant Current: 50A End Voltage: 8.0V
Fast Charge	Constant Current: 50A Constant Voltage: 14.4V 0.5A cut-off Charge Time: approx. 2.5 hours
Fast Discharge	Constant Current: 80A 1 min. 60A 20 mins. End Voltage: 8.0V
Max. Continuous Charge	50A
Max. Continuous Discharge	50A
Operation Temperature	Charge: 0°C to +45°C Discharge: -10°C to +60°C
Storage Temperature	Less than 1 year: -20°C to +25°C Less than 3 months: -20°C to +40°C

Handling of Cells

Never short circuit the battery cell. It generates very high current which causes heating of the cells and may cause electrolyte leakage which can be very dangerous. The Li-Fe tabs may be easily short circuited by putting them on a conductive surface. Such outer short circuit may lead to heat generation and damage of the cell. An appropriate circuitry with BMS shall be employed to protect accidental short circuit of the battery pack.

Storage

- The batteries should be stored at room temperature, charged to about 30% to 50% capacity.
- Valen recommend that batteries be charged around every 6 months to prevent over-discharge.

Disclaimer:
While Valen have taken every effort to represent the ENLiFEN PO4 accurately within this specification, Valen advise the user to ascertain their own measurements and test the parameters and specifications to which the battery must conform. The Lithium battery technology is rapidly being developed and research is continually carried out to ensure that the ENLiFEN PO4 battery will meet the needs of a growing market.

Specifications subject to change without notice.

AUSTRALIA
1300 734 253
sales@valen.com.au
www.valen.com.au

NEW ZEALAND
0800 734 253
sales@valen.co.nz
www.valen.co.nz