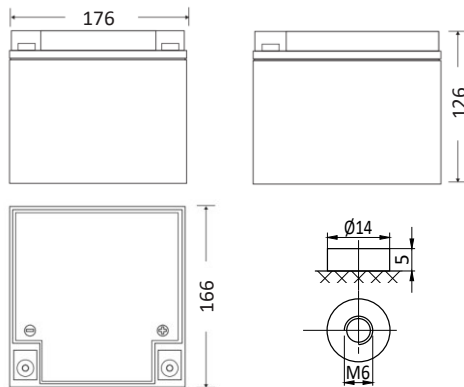


# 12 EL 25

## BATTERY SPECIFICATIONS



### ENLiFEN 12V25Ah

Valen ENLiFEN is a Lithium Phosphate (LiFe PO<sub>4</sub>) battery. Manufactured to the highest standards, the ENLiFEN Lithium Battery cells are quality tested in the factory and in our testing laboratories to ensure that this high level is maintained. The Battery Management System (BMS) allows the ENLiFEN battery to safely perform to your requirements without the fear of thermal runaway and explosion. Being fully sealed, the Valen ENLiFEN does not require special ventilation and can be fitted into a range of areas that are space restrictive. This specification is applied to the reference battery in this Specification and distributed by Regal Electro. The ENLiFEN PO<sub>4</sub> battery is constructed utilising a number of individual 3.2V3200mA battery cells in series and parallel. Charge and discharge parameters are determined by an in built BMS (Battery Management System)

#### BATTERY PACK SPECIFICATIONS

<b>Nominal Voltage</b>	12V
<b>Typical Capacity</b>	25.0Ah Standard discharge (0.5°C5A) after standard charge
<b>Minimum Capacity</b>	24.5Ah Standard discharge (0.5°C5A) after standard charge
<b>Dimensions</b>	176 (L)x 166 (W)x 126 (H)
<b>Weight</b>	2.5kg
<b>Terminal</b>	M5 Insert
<b>Container/Cover</b>	ABS
<b>Charging Ending Voltage</b>	14.8V
<b>Standard Charge</b>	Constant Current: 0.5°C5A Constant Voltage: 14.8V 0.01°C5A cut-off Charge Time: Approx. 4 Hours
<b>Standard Discharge</b>	Constant Current: 1°C5A End Voltage: 8.0V
<b>Fast Charge</b>	Constant Current: 1°C5A Constant Voltage: 14.8V 0.01°C5A cut-off Charge Time: Approx. 2.5 Hours
<b>Fast Discharge</b>	Constant Current: 1°C5A End Voltage: 8.0V
<b>Max. Cont. Charge</b>	1°C5A
<b>Max. Cont. Discharge</b>	5°C5A
<b>Internal Resistance</b>	Internal resistance measured at AC 1KHz after 50% charge
<b>Operation Temperature</b>	Charge: 0°C to 45°C Discharge: -10°C to 60°C
<b>Storage Temperature</b>	Less than 1 year: -20°C to 40°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 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.
- Ⓒ We recommend that batteries be charged about every 6 months to prevent over-discharge.

#### Disclaimer:

While Regal Electro have taken every effort to represent the ENLiFEN PO<sub>4</sub> accurately within this specification, we, Regal Electro, 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 our ENLiFEN PO<sub>4</sub> battery will meet the needs of a growing market.

