

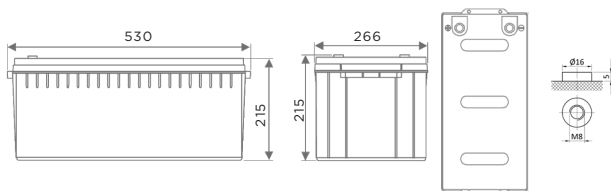
# 24 EL 100

## BATTERY SPECIFICATIONS

### ENLiFEN Lithium PO4 24V100Ah



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

<b>Voltage</b>	24 Volt nominal
<b>Capacity</b>	100Ah
<b>Chemistry</b>	Lithium Iron Phosphate (LiFePO4)
<b>Dimensions</b>	530(L) x 266(W) x 215(H)
<b>Weight</b>	26.8kg
<b>Terminal</b>	M8
<b>Container/Cover</b>	ABS
<b>Cycles</b>	4000 at 80% DOD
<b>Charging End Voltage</b>	28.8V
<b>Standard Charge</b>	Constant Current: 25A Charge Time: approx. 4 hours
<b>Standard Discharge</b>	Constant Current: 50A End Voltage: 8.0V
<b>Fast Charge</b>	Constant Current: 50A Constant Voltage: 28.8V 0.5A cut-off Charge Time: approx. 2.5 hours
<b>Fast Discharge</b>	Constant Current: 80A 1 min, 60A 20 mins. End Voltage: 8.0V
<b>Max. Continuous Charge</b>	50A
<b>Max. Continuous Discharge</b>	50A
<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 +25°C Less than 3 months: -20°C to +40°C

### Out Wire Specifications

<b>Discharge Capacity (0.5°C5A):</b>	-10°C	=	50%
	0°C	=	80%
	23°C	=	100%
	60°C	=	95%

### 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.

### Warnings and Precautions

- Do not short the terminals. Whilst the BMS will shut down current delivery, this may still be sufficient to cause fire and serious burns.
- Do not open the case.
- Do not immerse the battery in water or electrical conducting fluid.

### 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.