



# SOLAR POWER PACK

## VSOL-40

**38.5 W solar panels and a 40 Ah battery**

The VSOL-40 is Vega's latest solar power solution. Utilising the most efficient design for solar power packs, the VSOL-40 has four panels on a 10° lean to capture the maximum amount of sunlight. Its large 40 Ah battery makes it ideal for solutions that require increased battery autonomy.

Designed with a 200 mm top mount, the VSOL-40 is suitable to mount any of Vega's stand-alone beacons. This means you can mix and match any stand-alone beacon with the VSOL-40 to create the self-contained beacon that you need.

Built for a straight-forward installation, the VSOL-40 has been designed with ergonomic handles to make it easy to carry.



# OUTSTANDING FUNCTIONALITY AND FEATURES

The VSOL-40 has been designed as a simple, efficient and multi-function power pack which is easy to install. It has a gland that can take cables from 4.5 to 13.2 mm in diameter. It can supply power for any 12 V device that draws up to 2 A.

The solar charger contains a microprocessor-based charge controller to manage the charge rate to the battery depending on the ambient temperature and battery voltage.

## SIMPLE

The VSOL-40 has solar panels, battery and a solar charge regulator packaged together in a waterproof UV-stable case. There is no need to install a separate battery box or find a suitable location for mounting the solar panels.

## SAFE TO CARRY

The VSOL-40 is designed with the installer in mind featuring large ergonomic handles making it safe and easy to manoeuvre in the field.

## FAST TO SET-UP

A quick start guide that shows how to open the VSOL-40 and connect external devices to the internal junction box is included with every unit.

## CAPTURE MORE SOLAR ENERGY

Solar energy is captured by four large solar panels which are mounted on a 10° lean. This is to optimise their performance throughout the day as the angle of sunlight changes.

The VSOL-40 can supply energy for any 12V DC device. The VSOL-40 has a 200 mm top mounting face for marine devices meaning any standard stand-alone beacon can be mounted on it. The VSOL-40 can also connect with units that require more energy than standard stand-alone beacons, such as Vega's VRL-74 range light. Contact Vega's Solutions Engineers to talk about how the VSOL-40 could support your more high-powered applications.

## CALCULATING YOUR SOLAR ENERGY

When purchasing the VSOL-40, check how much power it can supply at your location by using the Vega solar calculator. Simply enter your location and your devices average current draw over a 24 hour period. The calculator will respond by telling you if it is suitable and how many days of operation you will have if there is no sunlight. Access the calculator by going to [www.vega.co.nz/calculators](http://www.vega.co.nz/calculators).

## MULTI-FUNCTION

Not only can you fit any standard stand-alone beacon on top of the VSOL-40; you will also have enough power to run Vega AIS Type 1 and Type 3 units. This will allow you to mix and match any beacon to create a self-contained beacon integrated with Vega AIS.

Whether it is a 5 or 14 NM solution, the VSOL-40 will be able to increase your battery autonomy across Vega's full range of solar powered beacons.



# SPECIFICATIONS

## ELECTRICAL PERFORMANCE

<b>Battery Capacity</b>	40 Ah
<b>Maximum Voltage</b>	38.5 V DC
<b>Voltage</b>	12 V DC

### Battery Comparison

Product	VLB-5X	VLB-36-XL	VSOL-40
Solar	16 W	30 W	38.5 W
Voltage	12 V DC	12 V DC	12 V DC
Battery	24 Ah*	24 Ah	40 Ah

\*Includes two 12 Ah batteries

## MATERIALS

<b>Base</b>	Engineering Grade Plastic
<b>Body</b>	Engineering Grade Plastic

## ENVIRONMENTAL

<b>Ingress Protection</b>	IP-68
<b>Operating Temperature</b>	-40°C to 70°C
<b>Salt</b>	Continuous exposure to saltwater and spray
<b>Wind</b>	140 KT
<b>Cooling</b>	Natural radiation
<b>Ice</b>	22 kg/m <sup>2</sup>

### Fully sealed battery compartment



## STANDARDS

<b>EMI/EMC</b>	EN55015 radiated and conducted emissions.
<b>Ingress</b>	IP68

### VLB-5X EXAMPLE CALCULATION FOR ANCHORAGE, ALASKA U.S

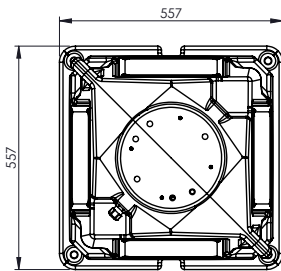
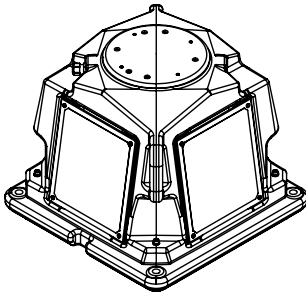
Latitude	61° North
Flash	FL 10s 1.0
Colour	White
Distance	4.5 NM
Divergence	7°
Effective Intensity	54 Candela
Autonomy	Standard (SS)- Not suitable Large One (LS1) – 41 days Large Two (LS2) – 82 days
Add VSOL-40	Stand-alone + VSOL-40 – 140 days

### VLB-5X EXAMPLE CALCULATION FOR ABERDEEN, SCOTLAND

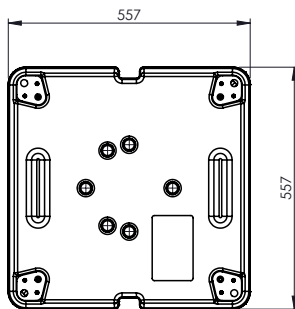
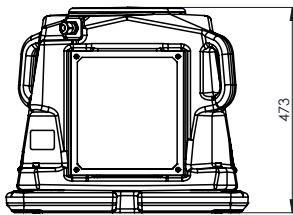
Latitude	57.1°
Flash	FL 5s 0.3
Colour	Red
Distance	4.0 NM
Divergence	7°
Effective Intensity	37 Candela
Autonomy	Standard (SS) – 76 days Large One (LS1) – 76 days Large Two (LS2) – 152 days
Add VSOL-40	Stand-alone + VSOL-40 – 180 days

# DIMENSIONS AND WEIGHTS

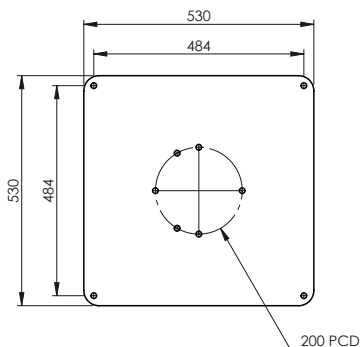
VSOL-40



Weight: 31Kg (With Battery)  
18Kg (Without Battery)



ADAPTOR PLATE



## PARTS FOR ORDERING

### DESCRIPTION

Solar Power Pack

### PRODUCT CODE FORMAT

VSOL-40

**Note:** If choosing a beacon to operate on top of the VSOL-40, please select from the list below.

- VLB-5X-SA
- VLB-36-SA
- VLB-44\*
- VAIS-t-ANT-VSOL-40\*\*

\* One or Two Tier models

\*\* Chose either t1 (Type 1) or t3 (Type 3)

### OPTIONAL EXTRAS

200 PCD Adaptor Plate 227-072

The VSOL-40 is shipped with the battery in a separate box. Four M12 mounting bolts are not included.

Vega prides itself on a long history of leading-edge optical innovation. For more information, please email the sales team at [sales@vega.co.nz](mailto:sales@vega.co.nz). For other factory options, visit our website, [www.vega.co.nz](http://www.vega.co.nz).



Telephone: +64 4 238 0200

Email: [sales@vega.co.nz](mailto:sales@vega.co.nz) [www.vega.co.nz](http://www.vega.co.nz)

21 Heriot Drive, Porirua

Wellington 5022, New Zealand

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