

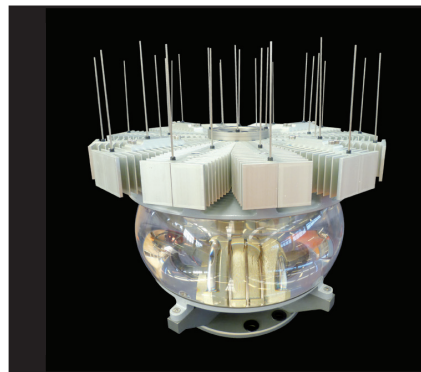
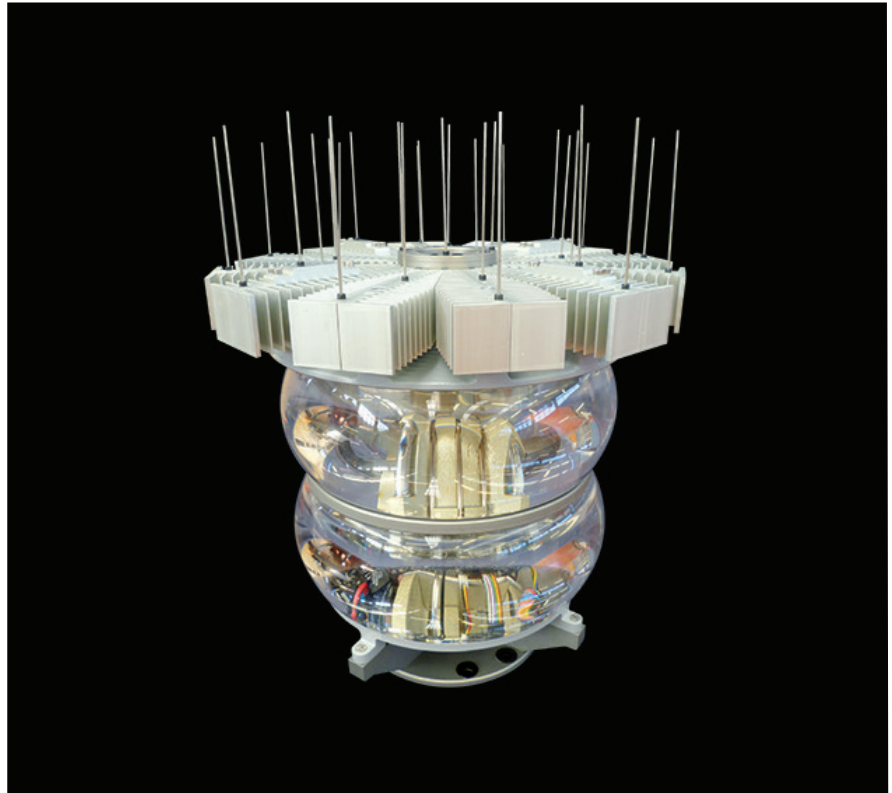
## VLB-92

13NM - 22NM @ 0.74T

The VLB-92 is state of the art long range LED beacon. It is intended for applications requiring very high intensity.

Depending on the configuration, the beacon is able to produce a range from 13-22NM at a transmissivity of 0.74T.

- **Effective intensity settings (5,800-240,000cd)**
- **Day/night transition level settings (40-250 lux range)**
- **Programmable flash characters, including IALA recommended characters**
- **Programmable custom character**
- **Synchronisation control including master/slave options and sync delay**
- **Synchronising delay can be set from 0 to 9.9 seconds**
- **Low voltage cut-out setting**
- **Optional security code**



### Monitoring

- **Using the VegaWeb internet monitoring unit via the data connector**
- **Using the AIS Aton transponder**
- **Using the hardwire data connections to third party transponder**

## Functionality and Features VLB-92

### About the VLB-92

The VLB-92 is Sabik Marine's brightest all-round beacon. It is ideally suited to replace incandescent beacons used as landfall lights.

The LEDs are connected with redundancy in mind. If one LED malfunctions, the remaining LEDs will continue with only a slight localised reduction in intensity, but the beacon will still be within specification.

The core strength of the VLB-92 is that it can sustain an output of 80,000cd per tier on a fixed character (up to 50°C outside temperature). This is due to a large heatsink, efficient optics and high performance LED driver.

The VLB-92 also has automatic Schmidt-Clausen correction to ensure short flashes are still visible at the required range.

### Features

- RS232 or RS485 Data Port for monitoring and software configuration
- Optional integrated GPS Synchronization using the VSU-29 GPS Sync Unit
- Beacon alarm output
- ON/OFF control inputs
- ON/OFF status output
- Hardwire synchronisation

### Standards

**Electromagnetic Interference:** EN55015:2006; 2007:Amd1; 2009: Amd2 radiated

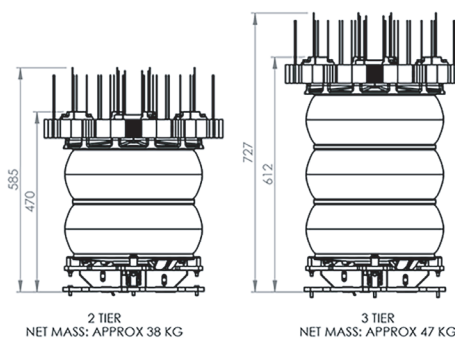
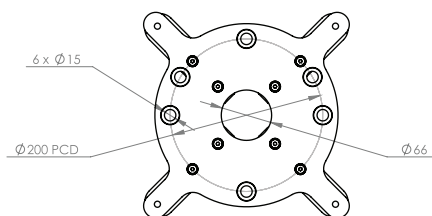
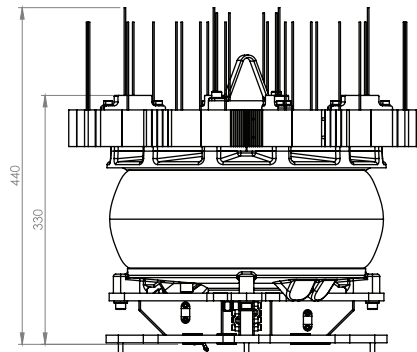
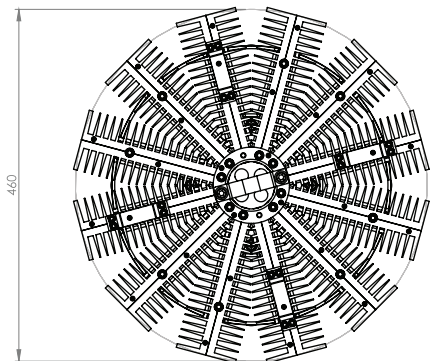
**Emissions:** EN61000-4-2:2008 Electrostatic Discharge Immunity: Level 4. EN61000-4-3: 2006 +A1: 2007, +A2 2010 Radiated

**Immunity:** Class 1. EN6100-4.5:2005 Class 3 Surge Immunity, 0.5kV lead-to-lead.

**Shock:** MIL-STD-202G, Method 213B, Cond H.10g shock vertical and 35g horizontal

**Vibration:** MIL-STD-202G, Method 204D Cond B 2g peak.

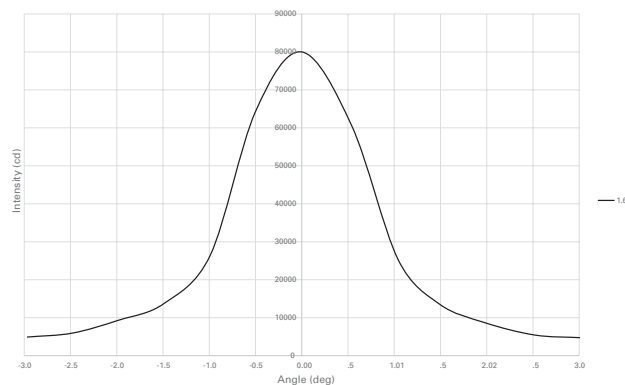
## Technical Specification VLB-92



### Optical Performance

<b>Maximum intensity</b>	240000cd
<b>Light source</b>	96 LEDs per tier
<b>Colours</b>	White
<b>Effective intensity</b>	Multiple level day and night Automatic Schmidt-Clausen correction
<b>Vertical divergence</b>	±0.8° @ 50% peak intensity ±1.6° @ 10% peak intensity
<b>Horizontal divergence</b>	360° (IALA Rec E-200-3)
<b>Flash Character</b>	246 standard characters + 1 custom 20 factory set custom characters

### Vertical profile



## Material

<b>Body</b>	Anodised marine grade aluminium
<b>Lens</b>	Machined cast acrylic
<b>Bird spike</b>	28 spikes, 316 stainless steel
<b>Base</b>	2 part painted cast marine grade aluminium

## Environmental

<b>Degree of Protection</b>	IP68 1.5m, 30min
<b>Temperature</b>	-30°C to 50°C
<b>Salt</b>	Continuous exposure to salt water and spray
<b>Ice loading</b>	20kg/m <sup>2</sup> on external surface
<b>Wind</b>	200kph

## Electrical performance

<b>Voltage</b>	24V nominal, 20 - 36VDC
<b>Protection</b>	Short circuit/reverse polarity
<b>Transient voltage</b>	500V-200A surges
<b>Standby Current</b>	50mA per unit @ 24V 100 mA @ 12V
<b>Overheat protection</b>	Beacon enters protection mode with reduced light intensity
<b>Day/Night transition</b>	3 photo sensors, 9 program settings Accuracy of sensor $\pm 20$ lux
<b>Input/Output</b>	Override On/Off $\geq 60$ VDC input Max sink-current 1.6mA

## Order Overview VLB-92

### Option matrix

<b>VSU-29</b>	GPS sync
<b>REMOTE-02</b>	Infrared remote

### Product code

Code	Note
VLB-92-W-1.6-24-Y	
<b>Y</b>	Tiers