



SLU-24 / SLU-36

LED light source to replace traditional lamp inside historical lighthouses

Sabik Lighthouse Unit (SLU-24 / SLU-36) is a reliable and efficient solid-state light source to replace traditional lamps in rotating or fixed classical lighthouse optics. It extends the service life of traditional lighthouses without expensive and complicated re-work or decommissioning activities. The product also offers many other additional benefits, such as the option for remote monitoring, lower maintenance costs and the possibility to utilize solar or other renewable power sources. All of this, while maintaining the traditional look, existing optics, rotating beam, flash characteristics, and heritage value of traditional lighthouses.

- **Rugged copper/aluminium body with special emphasis on heat management to ensure LED longevity**
- **Range up to 24 NM at Tc = 0,74**
- **Colors cool white and warm white**
- **Extremely low power consumption, suitable for solar and battery operation**
- **Integrated 16A solar panel charger using pulse width modulation**
- **Integrated flasher with automatic day-night switch**
- **Adjustable intensity and range**
- **Programmable with Sabik standard IR programming devices**
- **Integrated event log for 365 days**
- **Optional integrated GSM Remote monitoring**



Electrical Specification SLU-24 / SLU-36

Nominal voltage	24 VDC
Input voltage range	20 to 30 VDC
Reverse polarity protection	Yes
Current consumption at peak intensity	max 4.6 A (SLU-24) / 6.9 A (SLU-36)
Current by day	< 5 mA
LED over current protection	Yes
Battery cut off voltage	Programmable

Output characteristics

Color	Cool white (5000K - 6000K)	Warm white (2700K - 3000K)
Power consumption at peak intensity (W)	110W (SLU-24) / 165W (SLU-36)	110W (SLU-24) / 165W (SLU-36)
Power consumption at max avg. intensity (W)	65W (SLU-24) / 100W (SLU-36)	65W (SLU-24) / 100W (SLU-36)
Flash characteristic control	246 standard characters plus custom character	

Mechanical withstand and protection

Ingress protection	Equivalent to IP 10
Ambient temperature range	-30°C to +50°C

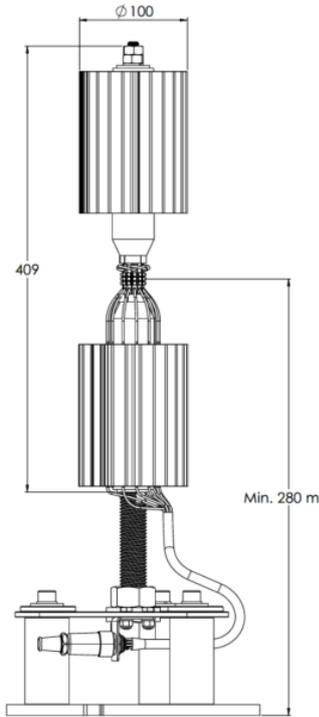
Other

Designed service life	>10 years
Maintenance	Only periodic cleaning of external surfaces required
Day / night transition	Programmable, default turn on at 15 lux / turn off at 60 lux

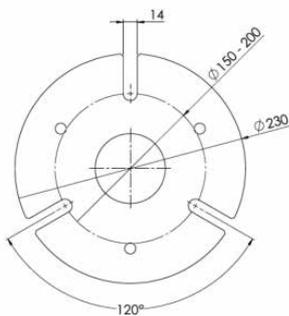
Standards

EMI/EMC	EN 55015:2006 +A1:2007, +A2:2009 radiated and conducted emissions
	EN 61000-4-2:2008, Electrostatic Discharge Immunity
	EN 61000-4-3:2006/AMD2:2010, Electromagnetic Compatibility
	EN 61000-4-5:2005 Class 3 Surge Immunity
	FCC 47 CFR Section 15 Class A
Colour	EN 61000-4-5:1995 Class 3 Surge Immunity
	IALA Recommendation E-200-1 "Marine Signal Lights - Colours" Edition 3 (December 2018)
Quality assurance	ISO 9001, ISO 14001, FAT upon request

- Will be customized to meet project specific needs
- Sabik team will support you from project definition to commissioning and operation as needed



SIDE VIEW
Weight approx 7 kg





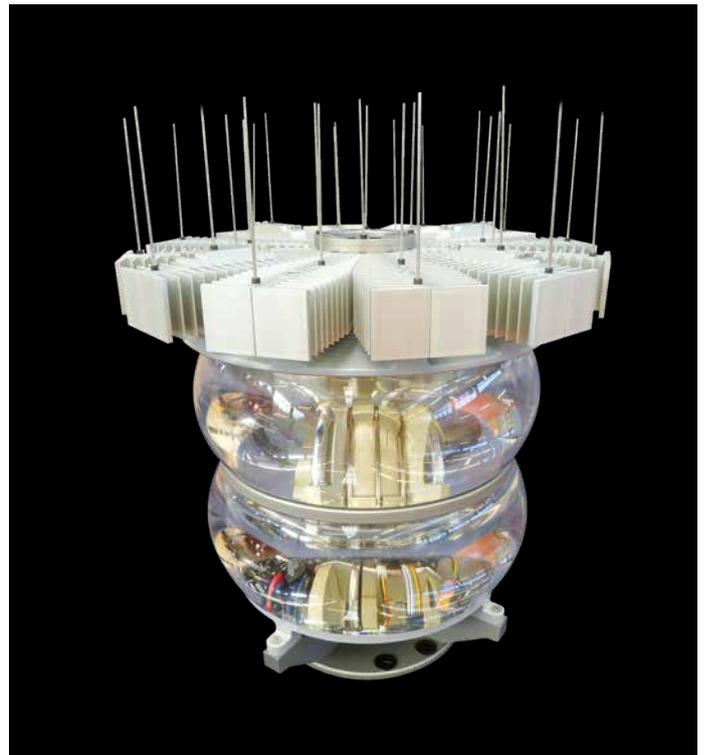
VLB-92

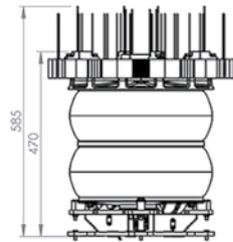
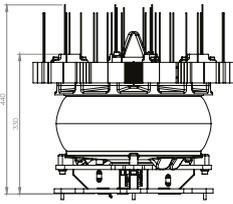
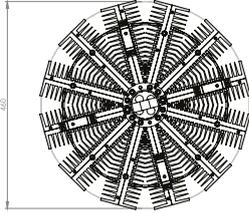
13NM - 22NM @ 0.74T

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

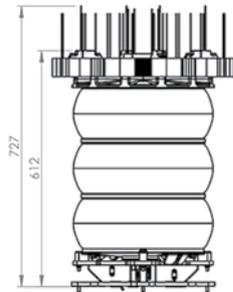
Depending on the configuration, the beacon is able to produce a range from 13-22NM at a transmissivity of 0.74T.

- **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**

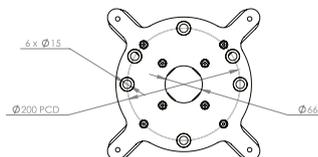




2 TIER
NET MASS: APPROX 38 KG



3 TIER
NET MASS: APPROX 47 KG



Optical Performance

Maximum intensity / layer	80000cd
---------------------------	---------

Optical specification

Light source	High Power Light Emitting Diode (LED)
Vertical divergence	±1.6° @ 50% peak ±0.8° @ 10% peak
Temperature control	LEDs monitored for constant intensity control and over temperature protection

Main Technical Specification

Nominal Range	Up to 22 NM
Lens	Machined cast acrylic
Base	2 part painted cast marine grade aluminium
Body	Anodised marine grade aluminium
Designed service life	10 years
Weight	1-tier 31,8kg 2-tier 38kg 3-tier 47kg
Flash character	246 standard characters plus 1 custom character; 20 factory set custom characters
Temperature range	-30° – +50°C
Voltage	24 VDC (20-36 VDC)
Solar charger	N/A
Degree of protection	IP 67
Cable length	2 m / 6 m

Order Overview VLB-92

Product code

Code	Note
VLB-92-W-1.6-24-Y	
Y	Tiers (1 T, 2 T, 3 T)

Option matrix

VSU-29	Optional integrated GPS synchronization using the VSU-29 GPS Sync Unit. VSU-29 requires 12 V operating voltage.
REMOTE-02	Infrared remote



VRB-25 LED

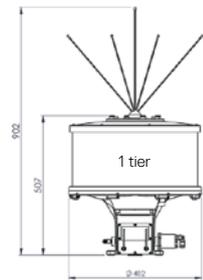
25NM @ 0.74T

The VRB-25 LED is a high intensity rotating beacon suitable for ranges up to 25 nautical miles. Being an LED beacon, it is extremely energy efficient and can be monitored digitally.

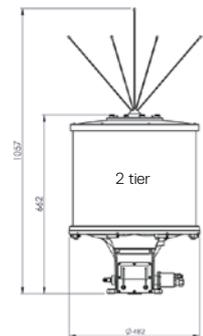
It is an ideal replacement for beacons with Fresnel lenses in historic lighthouses, or locations requiring intensities greater than what can be achieved with typical stationary beacons.

- Weatherproof enclosure suitable for external mounting
- Maintenance-free LED
- Constant-current LED drivers
- Direct-drive brushless motor
- 0.6 to 15.9RPM rotation speed with 240 increments
- Day and night intensity is adjustable from 0 to 100%
- Automatic day/night detection
- Optional security code
- Programmable low-voltage cut-out
- Selectable master/back-up operation mode
- Digital inputs/output
- RS232 port

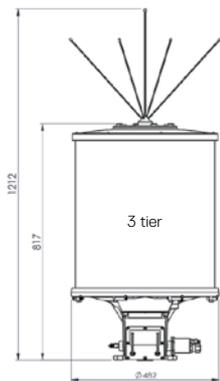




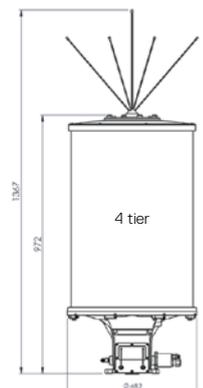
EST Weight: 43KG
Focal Height: 390mm



EST Weight 58KG
Focal Height: 467mm



EST Weight: 73KG
Focal Height: 545mm



EST Weight 87KG
Focal Height: 622mm

Optical Performance

Maximum peak intensity

1.5°	520000cd	520000cd	520000cd	520000cd
------	----------	----------	----------	----------

Optical specification

Light source	High Power Light Emitting Diode (LED)
Horizontal divergence	1.5° @ 5% of specified intensity
Vertical divergence	1.5° @ 5% of specified intensity
Temperature control	LEDs monitored for constant intensity control and over temperature protection

Main Technical Specification

Nominal Range	Up to 25 NM
Lens	Machined cast acrylic
Base	Cast marine grade aluminium, anodised and painted
Body	Anodised marine grade aluminium
Designed service life	10 years
Weight	1 tier: 43 kg
	2 tier: 58 kg
	3 tier: 73 kg
	4 tier: 87 kg
Flash character	Dependent on configuration
Temperature range	-35° – +50°C
Voltage	12 VDC
Solar charger	N/A
Degree of protection	IP 65
RPM range	0.66-15.9
Cable length	2 m / 6 m

Order Overview VRB-25 LED

Product code

Code	Note
VRB25-xP-nT-LED	
x	Number of panels (6 or 8)
n	Number of tiers (1, 2, 3, 4)

Option matrix

LPD-02	Lightening protection device factory option
--------	---