

The beacon E836 is a LED-based signal lantern with built in flasher for using in moorings and other fixed lights. The visibility range of a lantern consisting of one LED-disc light source is 3 NM, however, it can be enhanced adding one or several LED-discs into the lantern

General benefits of using LED-lanterns

Long lifetime (up to ten years). This makes the maintenance costs of LED-lanterns, in comparison with traditional light bulbs, much lower because there will be no need in frequent and expensive maintenance trips to lights only for the purpose of changing of failed bulbs.

Significantly lower power consumption (up to 1.5 times) due to higher efficiency of LEDs. This is very useful when using them in primary battery powered sea buoys, as well as in case of lighthouses and beacons powered by solar or wind energy.

No need for colour filters and additional optics. The color of the light of LEDs is determined by the physical properties of light-emitting semiconductor crystals used in them, i.e. by the type of LEDs. Therefore, no additional colour filter is needed which would cause some loss of light intensity.

Features

- programmable automatic control of flashing
- daylight switching ON and OFF of flashing by the external photosensor
- synchronization of flashing with other lights
- relatively high intensity of the radiated light
 - from 10 to 30cd per disc
- wide range of power supply voltage
 - from 6V to 20V
- optional enlarging of power by an external resistor
- optional choice of vertical divergence



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Specification

Main components	1...5 LED-disc light sources, flasher E864, case, lantern cover*)
Input voltages	10V ...20V DC
Power consumption of 1 disc	2...3.3W
Flash length (programmable)	any multiples of 10ms, up to 60.01s
Period time (programmable)	any multiples of 20ms, up to 655.5s
Light sources	150mm LED-discs E801...E804
Vertical divergence	2 1/2>25 , 2 1/10>50 , 2 (0.5cd)>60
Ambient temperature	-30°C to +55°C** (IEC 60068-2-1,2,14)
Relative humidity	max 98% at +35°C (IEC 60068-2-3)
Dimensions	see the drawing below
Weight (average)	5.8kg

*) customer specified ** the temperature range can be optionally extended

Number of LED-discs	Red E801		Yellow E802		Green E803		White E804	
	Light intensity	Range NM	Light intensity	Range NM	Light intensity	Range NM	Light intensity	Range NM
1	10(15)	2.6 (3.0)	10(15)	2.6 (3.0)	15(20)	3.0 (3.3)	10(15)	2.6 (3.0)
2	20(30)	3.3 (3.8)	20(30)	3.3 (3.8)	30(40)	3.8 (4.1)	20(30)	3.3 (3.8)
3	30(45)	3.8 (4.2)	30(45)	3.8 (4.2)	45(60)	3.3 (4.6)	30(45)	3.8 (4.2)
4	40(60)	4.1 (4.6)	40(60)	4.1 (4.6)	60(80)	4.6 (4.7)	40(60)	4.1 (4.6)
5	50(75)	4.4 (4.7)	50(75)	4.4 (4.7)	75(100)	4.7 (4.9)	50(75)	4.4 (4.7)
E80x.1	1 disc with a lens		1 disc with a lens		1 disc with a lens		1 disc with a lens	
Intensity	20 (30)cd		20 (30)cd		25 (35)		20 (30)	
Vert. div.	2 1/2>8° (typ)		2 1/2>8° (typ)		2 1/2>8° (typ)		2 1/2>8° (typ)	

***) at the atmospheric transparency 0.74; (x) - optionally enlarged power

