

## SABIK LED 160

Full range lantern for fixed and floating installations

This all-round LED 160 lantern has world-class optical performance with options for buoys and fixed installations. Three different lantern options available covering a range from 3 NM up to 12NM ( $T_c = 0,74$ )

- Standard IALA colours Red, Green, White, Yellow and Blue
- Best in class optical performance
- New designed rugged injection moulded aluminium housing
- Field installation easy thanks to the integrated junction box with 3 cable entries
- Extremely low power consumption, suitable for solar and battery operation
- Integrated 16A solar panel charger
- Adjustable intensity and range
- The lantern is available in two different versions. LED 160 with Narrow 5° and with Wide 10° vertical divergence, and the LED 160H with a 2,5° vertical divergence.
- Programmable with Sabik standard IR programming devices
- Optionally integrated GPS synchronization
- Optionally integrated GSM/GPS remote monitoring
- Can be programmed and controlled up to 50 meters distance with Bluetooth® Control





**Optics**  
Optics designed for high power LEDs.



**Supply cable**  
Integrated junction box with up to 3 cable entries.



**Cable connection**  
Connection to spring type terminal block.



**Grounding plug**  
The base plate has a grounding plug to enable good protection against electromagnetic interference.



**Programming**  
Combined IR programming and photocell window in lantern base.



**PTFE breathing**  
Vent for pressure release for both junction box and lantern housing.



**GSM/GPS monitoring**  
Special designed lantern top for GSM and GPS antennas.



**Bird spike**  
Bird spike with thread to be installed in the center of the lantern top.



**Lantern colour**  
Lantern colour is clearly indicated by the colour plate.



**Installation**  
The bottom plate supports installation on structure with 3x M12 or 4xM12 bolts on a 200 mm diameter.

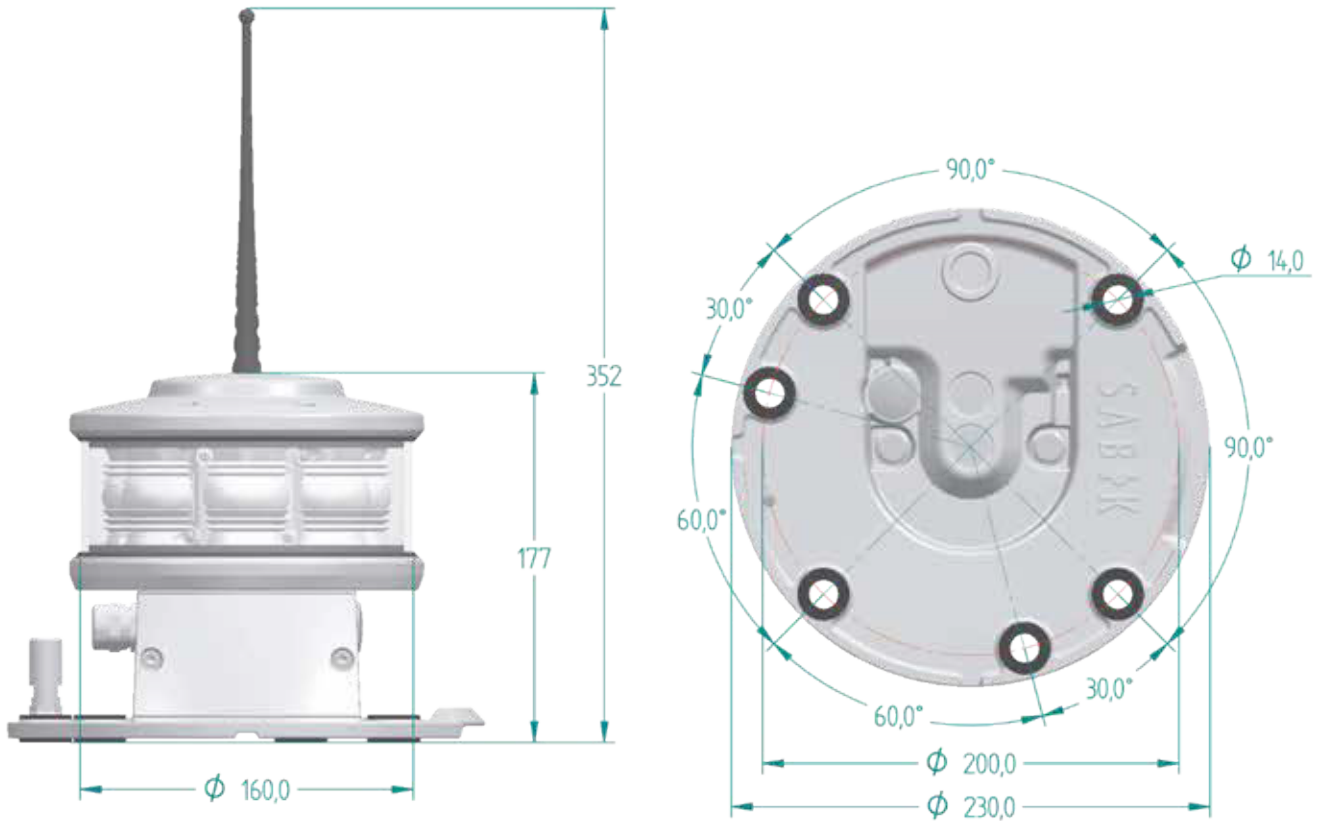


**Bluetooth® Control**  
Lantern can be programmed and controlled up to 50 meters distance with standard android and iOS mobile phones.



**Sabik Easy Programmer**  
User friendly and compact wireless two-way programmer.

## Technical Specification LED 160



### Optical performance

Maximum fixed intensity LED 160H (2,5° @ 50% of top intensity)

|                |         |
|----------------|---------|
| Max power 36 W | 4300 cd |
|----------------|---------|

Maximum fixed intensity LED 160N (5° @ 50% of top intensity)

|                   |         |         |         |         |
|-------------------|---------|---------|---------|---------|
|                   | 1150 cd | 1200 cd | 1000 cd | 1850 cd |
| Power consumption | 13 W    | 16 W    | 16 W    | 16 W    |

Maximum fixed intensity LED 160W (10° @ 50% of top intensity)

|                   |        |        |        |         |
|-------------------|--------|--------|--------|---------|
|                   | 620 cd | 720 cd | 620 cd | 1100 cd |
| Power consumption | 13 W   | 16 W   | 16 W   | 16 W    |

Main Technical Specification

|                                 |  |
|---------------------------------|--|
| Lens visual/Mechanical diameter | 160 mm   |
| Lens material                   | UV stabilized Acrylic  |
| Light source                    | High Power Light Emitting Diodes   |
| Vertical divergence             | 2,5°@50% of peak intensity (FWHM)<br>5°@50% of peak intensity (FWHM)<br>10°@50% of peak intensity (FWHM) |
| Weight                          | 3,3 kg   |
| Temperature range               | -40° – +60°C   |
| Supply Voltage                  | 10 – 32 VDC  |
| Solar Panel Charger             | 16 ampere PWM charger  |
| Power consumption               | 12 W – 17 W  |
| Power consumption LED 160H      | 48 W   |
| Degree of protection            | IP 67  |

MARINE LANTERNS

## Order Overview LED 160

Option matrix

|                                 |  |
|---------------------------------|--|
| Optical feedback<br>OPT 1L      | Integrated LED performance measurement                         |
| GPS sync<br>OPT 4L              | Integrated GPS sync including GPS antenna                      |
| LightGuard GSM + GPS<br>OPT 9L  | Integrated GSM/GPS based monitoring including GSM/GPS antennas |
| Battery control card<br>OPT 11L | Control card for secondary (emergency) battery                 |

Product codes

| LED 160H High intensity lantern | LED 160N Lantern with narrow lens designed for fixed structures | LED 160W Lantern with wide lens designed for buoys | Colour |
|---------------------------------|---|--|--------|
| LED 160HW                       | LED 160NW   | LED 160WW  | white  |
|                                 | LED 160NR   | LED 160WR  | red    |
|                                 | LED 160NG   | LED 160WG  | green  |
|                                 | LED 160NY   | LED 160WY  | yellow |
|                                 | LED 160NB   | LED 160WB  | blue   |

Product code example: LED 160NGOPT9L

- LED 160NG is Sabik code for LED 160 with narrow lens in green
- with a selection of option 9 integrated GSM/GPS monitoring