



## LED 160

Full range lantern for fixed and floating installations

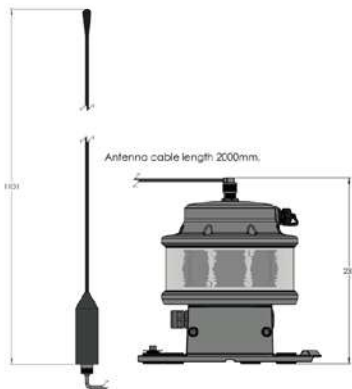
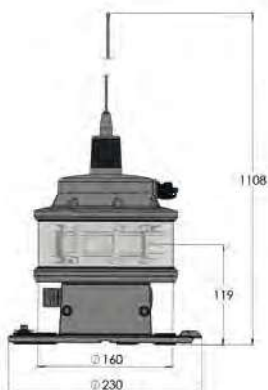
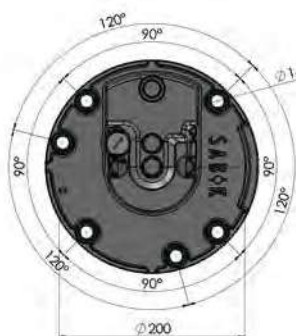
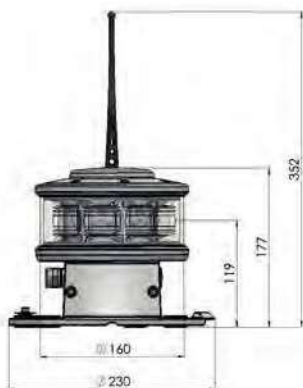
This all-round LED 160 lantern has world-class optical performance with options for buoys and fixed installations. Three different lens options available covering a range from 3 NM up to 12NM (Tc = 0,74)

- Standard IALA colours  
red, green, white, yellow and blue
- Best in class optical performance
- New designed rugged injection moulded aluminium housing
- Easy field installation 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 three 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 IR programmer or with Bluetooth® control from up to 50m distance
- Optionally integrated GPS synchronization
- Optionally integrated GSM/GPS remote monitoring
- Available with integrated AIS



### Integrated AIS

- Available in two models: Type 1 (FATDMA) and Type 3 (RATDMA)
- AIS transponder integrated in the top part of the lantern
- Integrated GPS antenna and external VHF antenna included in the delivery
- Extremely low power consumption when used as Type 1 <45mW with 1 message/ 3 minutes (about 0,09 Ah/day)
- Support messages: 6 and 21
- Supports up to 10 virtual Aton:s



### Product code example: LED-160-NG-9L

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

## Optical performance

### Maximum fixed intensity LED 160H

Max power 36 W	4300 cd
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### Maximum fixed intensity LED 160N

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

### Maximum fixed intensity LED 160W

	550 cd	850 cd	550 cd	1100 cd
Power consumption	12 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) 5°@50% of peak intensity (FWHM) 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	13W – 16W
Power consumption LED 160H	36 W
Degree of protection	IP 67
Cable length	2 m / 6 m

## Order Overview LED 160

### 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-160-HW	LED-160-NW	LED-160-WW	white
	LED-160-NR	LED-160-WR	red
	LED-160-NG	LED-160-WG	green
	LED-160-NY	LED-160-WY	yellow
	LED-160-NB	LED-160-WB	blue

### Option matrix

GPS sync	Integrated GPS sync including GPS antenna
OPT 4L	
LightGuard GSM + GPS	Integrated GSM/GPS based monitoring including GSM/GPS antennas
OPT 9L	
Battery control card	Control card for secondary (emergency) battery
OPT 11L	
Automatic Identification System	OPT AIS 1: Lantern with integrated AIS type 1 OPT AIS 3: Lantern with integrated AIS type 3
OPT AIS	