



## LED 160

### Standalone lantern for buoys and beacons

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 12 NM @0.74T

- 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
- Range 18,1 NM by night and 1 NM by day @ 0,85T
- Programmable with Sabik IR programmer or with Bluetooth control from up to 50 m distance
- Optionally integrated GPS synchronisation
- Optionally integrated GSM 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 < 45 mW with 1 message / 3 minutes (about 0.09 Ah/day)
- Support messages: 6 and 21
- Supports up to 10 virtual AtoN:s

## Performance

	Vertical divergence @ 50% peak intensity	Peak intensity red	Peak intensity green	Peak intensity yellow	Peak intensity white
LED160-10D	10°	550 cd	550 cd	800 cd	1 100 cd
LED160-05D	5°	1 000 cd	1 000 cd	1 200 cd	1 850 cd
Power consumption @ peak intensity		13 W	16 W	16 W	16 W
LED160H-03D	3°				4 500 cd
Power consumption @ peak intensity					40 W

## Electrical specification

Nominal operating voltage	12 VDC / 24 VDC
Operating voltage range	10 - 32 VDC
Solar panel charger	16 A PWM charger

## Main technical specification

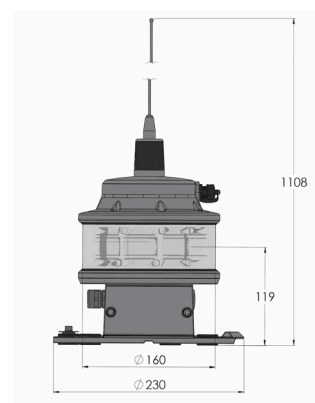
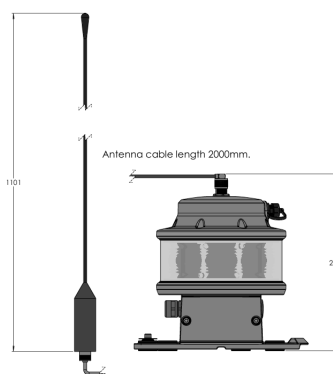
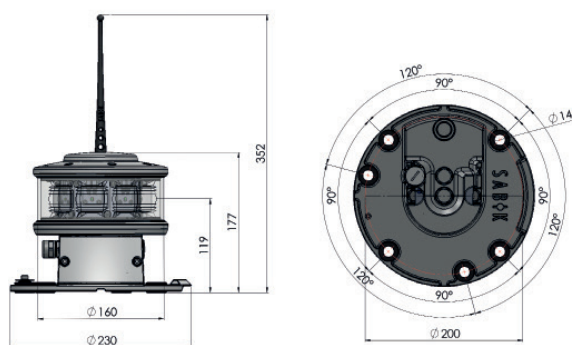
Lens visual / Mechanical diameter	160 mm
Lens material	UV stabilized acrylic
Light source	High Power Light Emitting Diodes
Ingress protection	IP68
Unit lifetime	Up to 10 years
Weight	3.3 kg / 7.2 lb
Temperature range	-40° to +60°C / -40° to +140°F
Cable length	2 m / 6.5 ft

## Functional features

Remote monitoring	Optional: GSM & AIS
Programming	Infra red programmer
Synchronization	Wire sync, optional: GPS
Flash character	246 standard + 1 custom character
Day / night mode	Automatic and programmable 0.3% - 100% intensity

## Dimensions

Product	Packing dimensions (DxWxH) mm	Gross weight kg	Packing dimensions (DxWxH) inch	Gross weight lb
LED-160	250x250x200	4.7	9.8x9.8x7.8	10.3



## Product code

Code	Note
LED160-cddd-OPT	
ddd	Lens option (10D, 05D or 03D) 10D: 10° 05D: 5° 03D: 3°
c	colour (W, R, G, or Y)
OPT	Option (1L, 4L, 9L, 11L, AIS1 or AIS3)

## Product code example: LED160-W10D-9L

- **LED160-W10D** is Sabik code for LED 160 white lantern with 10° lense
- **9L** is a selection of option 9L integrated GSM / GPS monitoring

## Option matrix

1L: Optical feedback	Integrated LED performance measurement
4L: GPS sync	Integrated GPS sync including GPS antenana
9L: LightGuard GSM + GPS	Integrated GSM / GPS based monitoring including GSM / GPS antennas
11L: Battery control card	Control card for secondary (emergency) battery
AIS1	Lantern with integrated AIS type 1
AIS3	Lantern with integrated AIS type 3