SABIK MARINE

ORION

LED 160

Full range lantern for fixed and floating installations

This all-round LED 160 lantern has world-class ooptical 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 cless optical performance

- New designed rugged injection moulded aluminium housing

- Easy fiel installation thanks to the integrated junction box with 3 cable entries

- Extremely low ppower 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

- 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 3° vertical divergence

- Programmable with Sabik IR programmer or with Bluetooth control from upp to 50 m distance

- Optionally integrated GPS synchronisation

- 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 < 45 mW with 1 message / 3 minutes (about 0.09 Ah/day)
- Support messages: 6 and 21
- Upports up to 10 virtual AtoN:s

LED 160

Performance

	Vertical divergence @ 50% peak intensity	Peak intensity red	Peak intensity green	Peak intensity yellow	Peak intensity white
LED-160-W	10°	550 cd	550 cd	800 cd	1 100 cd
LED-160-N	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
LED-160-H	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

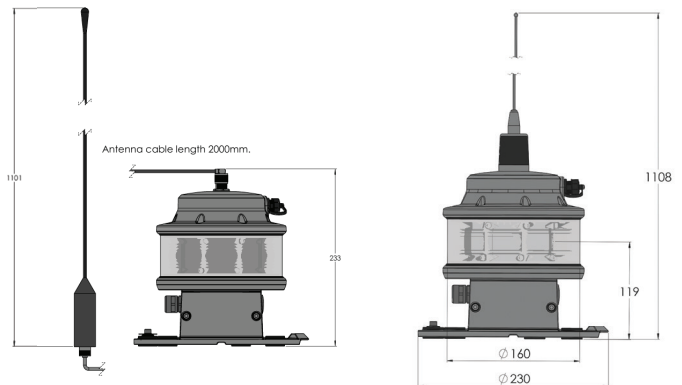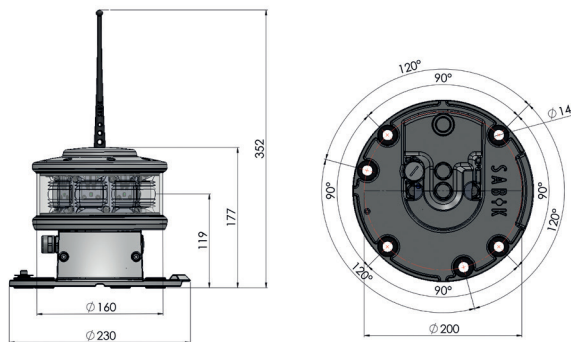## Main technical specification

Lens visual / Mechanical diameter	160 mm
Lens material	UV stabilized acrylic
Light source	High Power Light Emitting Diodes
Ingress protection	IP67
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
Sychronization	Wire sync, optional: GPS
Flash character	246 standard + 1 custom character
Day / night mode	Automatic and programmable 0.3% - 100% intensity

Product code

Code	Note
LED-160-Lc-O	
L	Lens option (W, N or H) W: 10° N: 5° H: 3°
c	colour (W, R, G, or Y)
O	Option (1L, 4L, 9L, 11L or AIS)

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

Option matrix

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

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