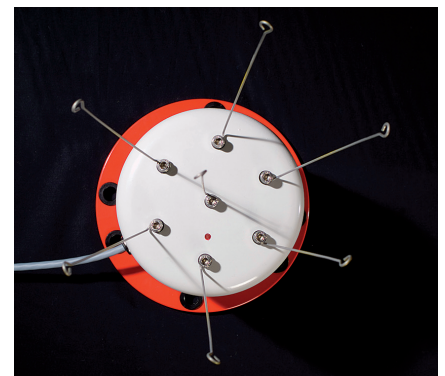
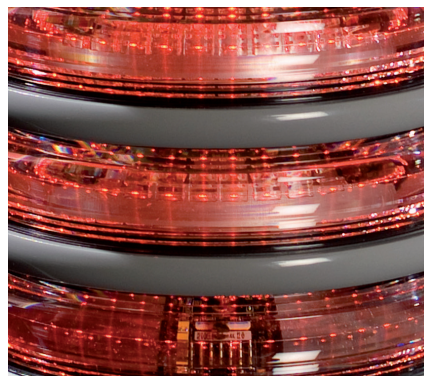
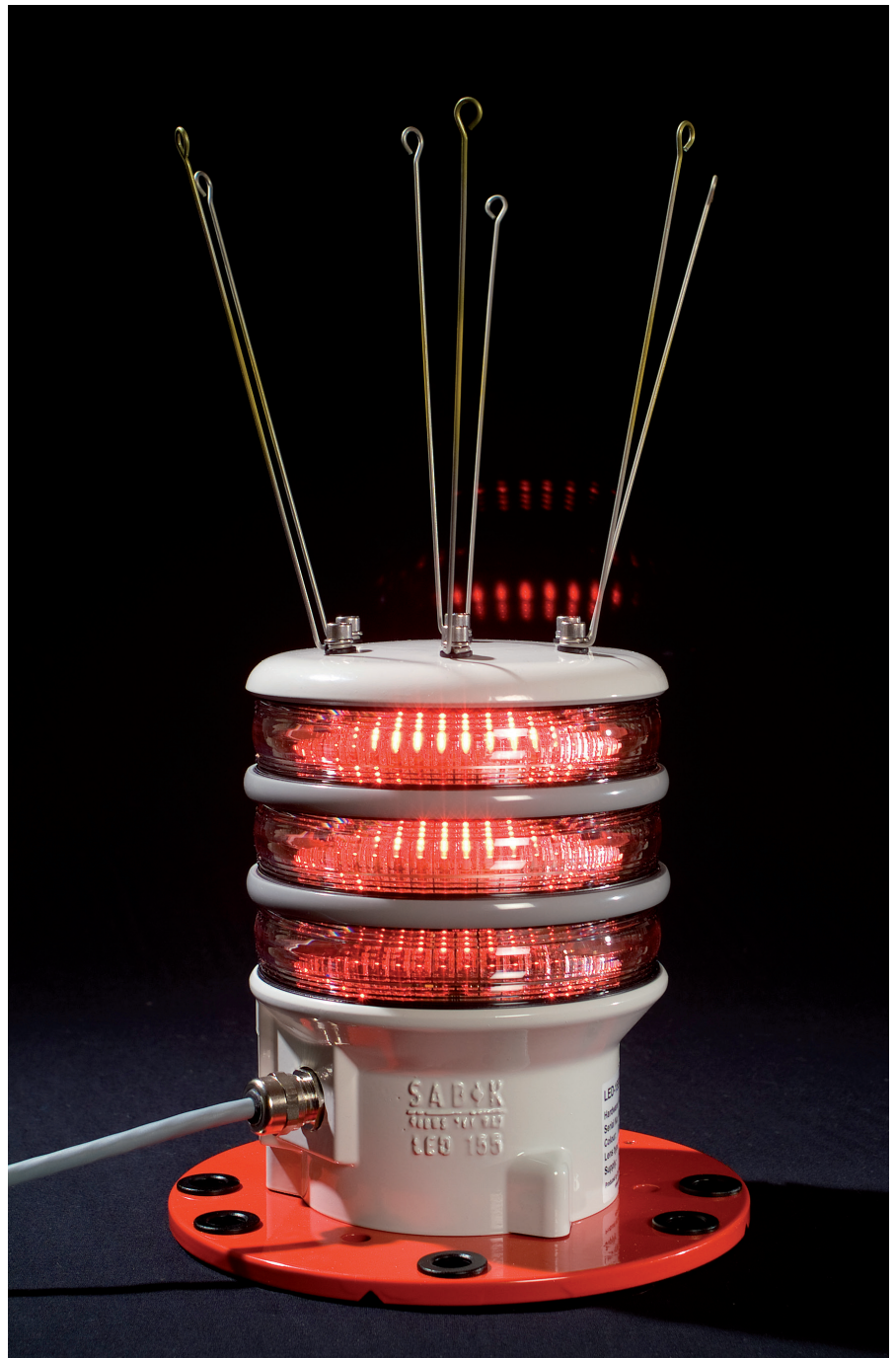


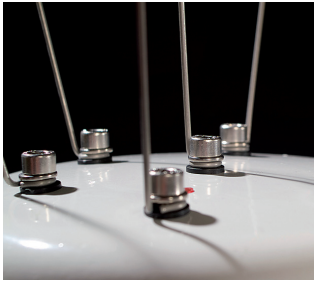
LED 155

Marine LED lantern for buoys and minor beacons

LED 155 is a general purpose LED lantern commonly used on both fixed and floating structures. The lantern is modular in design. It can be configured with two different vertical divergencies and 1-3 tiers depending on operational requirements.

- Range up to 8 NM at $T_c = 0,74$
(12 NM at $T_c = 0,85$)
- Standard IALA colours Red, Green, White, Yellow and Blue/Yellow
- Rugged aluminium housing for installation in harsh marine environments
- Extremely low power consumption, suitable for solar and battery operation
- Integrated flasher with day-night switch
- Integrated 16A solar panel charger using pulse width modulation
- Adjustable intensity and range
- Available with narrow (6°) or wide (10°) vertical divergence
- Programming with any of Sabik wireless programmers
- Integrated event log for 365 days
- Optionally integrated GPS synchronization
- Optionally integrated GSM Remote monitoring





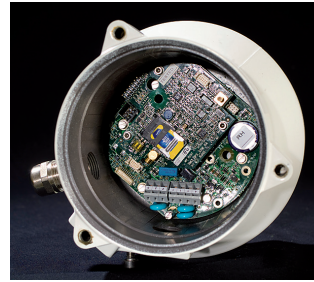
Bird spikes

Stainless steel as standard. Easy to replace. Special spikes for protection against cormorants and other large birds on request.



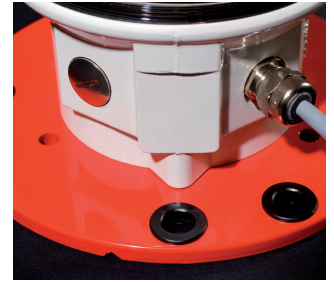
GPS

GPS unit and antenna integrated in the lantern for wireless synchronization and for position monitoring.



Light Guard GSM

GSM unit and antenna integrated in the lantern for remote monitoring and control.



Additional cable entry

Equipped as standard with two cable entries. If the second entry is needed e.g. for a solar module, a standard M20 cable gland can be fitted.



Sabik Easy Programmer

User friendly and compact wireless two-way programmer.



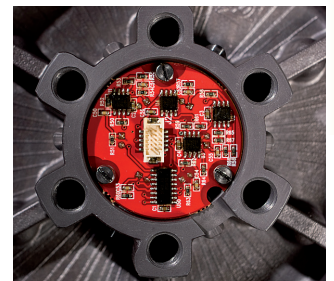
PDA Programmer

Wireless two way infra red communication with Sabik PDA Programmer to set flash code, range, photocell switch level etc. Event log data is also readable with the Programmer.



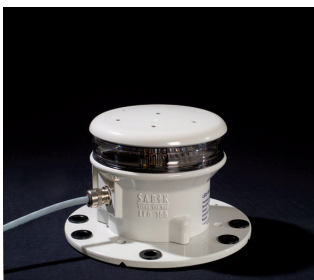
Installation

The bottom plate supports installation on structure with 3 x M12 bolts on a 200 mm diameter. The mounting holes are galvanic isolated with plastic isolators. PTFE breathing vent for pressure release.

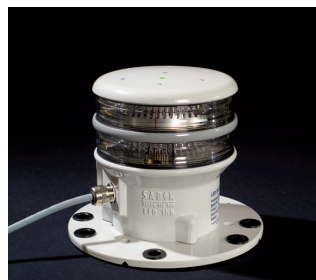


OFBS

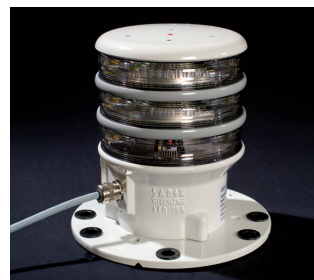
The Optical Feedback System (OFBS) enables built-in monitoring of LED degradation over time.



Simplex



Duplex



Triplex



White



Red

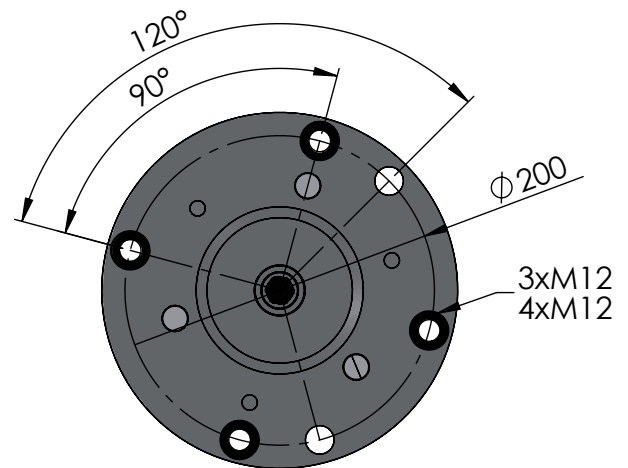
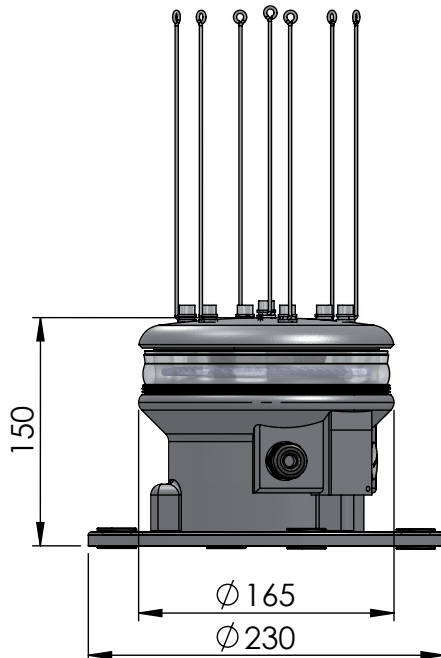


Green



Yellow

Technical Specification LED 155



Optical performance LED 155

Maximum fixed intensity, narrow lens
(fixed structures)

Simplex, 6 W	140 cd	270 cd	420 cd	200 cd
Duplex, 12 W	266 cd	513 cd	720 cd	380 cd
Triplex, 18 W	392 cd	756 cd	1080 cd	560 cd

Maximum fixed intensity, wide lens
(floating structures)

Simplex, 6 W	120 cd	180 cd	250 cd	100 cd
Duplex, 12 W	228 cd	342 cd	450 cd	190 cd
Triplex, 18 W	336 cd	504 cd	675 cd	280 cd

Optical performance LED 155 B/Y

Maximum fixed intensity

Nominal 5 W	45 cd	45 cd
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Main Technical Specification LED 155

Lens visual/Mechanical diameter	160 mm
Lens material	UV stabilized Polycarbonate
Light source	Light Emitting Diodes (LEDs)
Vertical divergence	6° or 10° @ 50% (±1°) and 10° or 20° @ 10% (±2°) of peak intensity
Unit lifetime	Up to 10 years
Weight	3,9 kg for single tier unit
Temperature range	-40°...+60°C
Supply Voltage	10– 32 VDC
Solar Panel Charger	16 ampere PWM charger
Power consumption	6 watts / tier
Degree of protection	IP68

Main Technical Specification LED 155 B/Y

Lens visual/Mechanical diameter	160 mm
Lens material	UV stabilized Polycarbonate
Light source	Light Emitting Diodes (LEDs)
Vertical divergence	10° @ 50 % (± 1°) of peak intensity
Unit lifetime	Up to 10 years
Weight	4,2 kg
Temperature range	-40°...+60°C
Supply Voltage	10 – 32 VDC
Power consumption	6 watts

Order Overview LED 155

Option matrix

OPT 1: Optical Feedback System	Integrated LED performance measurement
OPT 4: GPS sync	Integrated GPS sync including GPS antenna
OPT 7: External GPS	External GPS antenna
OPT 9: LightGuard GSM + GPS	Integrated GSM based monitoring including GSM/GPS antennas
OPT 10: LightGuard GSM	Integrated GSM based monitoring including GSM antenna
OPT 11: Control card	Control card for secondary battery
OPT 12: Aux card with I/O	Aux card including I/O ports
OPT 13: Aux card with RS485 and I/O	Aux card including RS 485 and I/O port
Shock & Tilt Sensor	Integrated 3-axis G sensor for tilt and shock sensing

N = Narrow (6° @ 50 % of peak intensity) single tier (standard)		Two tiers (duplex)		Three tiers (triplex)	
Red	LED 155-1NR	Red	LED 155-2NR	Red	LED 155-3NR
Yellow	LED 155-1NY	Yellow	LED 155-2NY	Yellow	LED 155-3NY
Green	LED 155-1NG	Green	LED 155-2NG	Green	LED 155-3NG
White	LED 155-1NW	White	LED 155-2NW	White	LED 155-3NW

W = Wide (10° @ 50 % of peak intensity) single tier (standard)		Two tiers (duplex)		Three tiers (triplex)	
Red	LED 155-1WR	Red	LED 155-2WR	Red	LED 155-3WR
Yellow	LED 155-1WY	Yellow	LED 155-2WY	Yellow	LED 155-3WY
Green	LED 155-1WG	Green	LED 155-2WG	Green	LED 155-3WG
White	LED 155-1WW	White	LED 155-2WW	White	LED 155-3WW

Product code example: LED 155-3NROPT9

- LED 155-3 is Sabik code for a three-tier LED 155
- NR is the code for a Narrow Red lens with a selection of option 9 GSM monitoring together with GSM/GPS antennas

Order Overview LED 155 B/Y

Wreck marking lantern blue/yellow

Option matrix

OPT 4: GPS sync	GPS Synchro unit with GPS antenna integrated in the top of the lantern
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