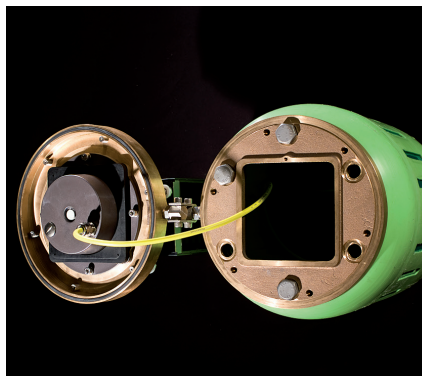


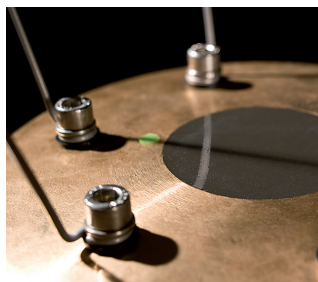
MPV LED

Heavy duty ice buoy LED lantern

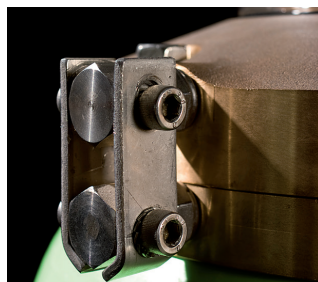
The MPV LED is a LED lantern designed to be used in most severe ice conditions, and is capable of surviving the crushing pressure and dynamic forces of ice in winter conditions.

- Rugged bronze alloy housing for installation in harsh marine environments
- Designed to be fully water proof – can withstand submersion down to 100 meters
- Integrates firmly into buoy top – presents a very low profile to lateral forces from ice
- Enables battery replacement through lantern without removing the lantern from buoy
- Visual range from 2 to 6 NM ($T_c = 0,74$)
- Standard IALA colours Red, Green, White and Yellow
- Extremely low power consumption; ideal for primary battery operation
- Integrated flasher with day light switch
- Adjustable intensity and range
- Configuration and field maintenance with wireless Sabik Easy Programmer, PDA or with a computer
- Integrated 365 day event log
- Optionally integrated GPS synchronization
- Optionally integrated GSM Remote monitoring





Bird spikes
Stainless steel as standard.
Easy to replace.



Hinged
The primary battery can be changed easily as hinged flanges allow the lantern to open safely in sea conditions. The lantern acts as the water-proof door to the battery cabin.



Bronze Alloy
The special bronze alloy is corrosion resistant and will survive continuous abuse from moving ice blocks.



Polycarbonate lens
The low profile optical lens is designed to give minimum exposure to ice forces and is supported by the lantern structure sufficient to protect the unit in arctic conditions.



GPS
GPS unit and antenna integrated in the lantern for wireless synchronization and for position monitoring. The integrated GPS antenna is moulded and survives ice pressure.



GSM
GSM unit and antenna integrated in the lantern for remote monitoring and control. For more information please see the LightGuard Section.



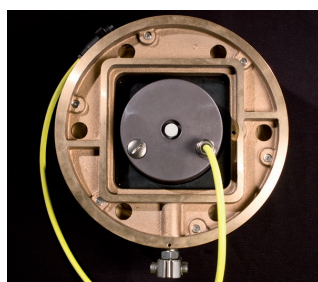
Additional cable entry
Equipped as standard with two cable entries. If the second entry is needed e.g. for a solar module, a standard M20 cable gland can be fitted.



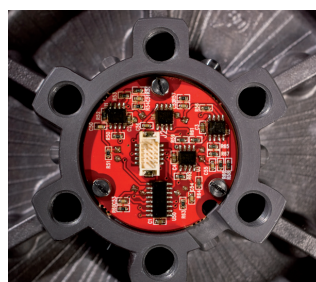
Sabik Easy Programmer
User friendly and compact wireless two-way programmer.



PDA Programmer
Wireless two-way communication using a Windows based PDA with infra red port. Flash code, range and photocell switch level etc. can be set. The Programmer can also retrieve the Event Log. No need to open the lantern on a normal service call.

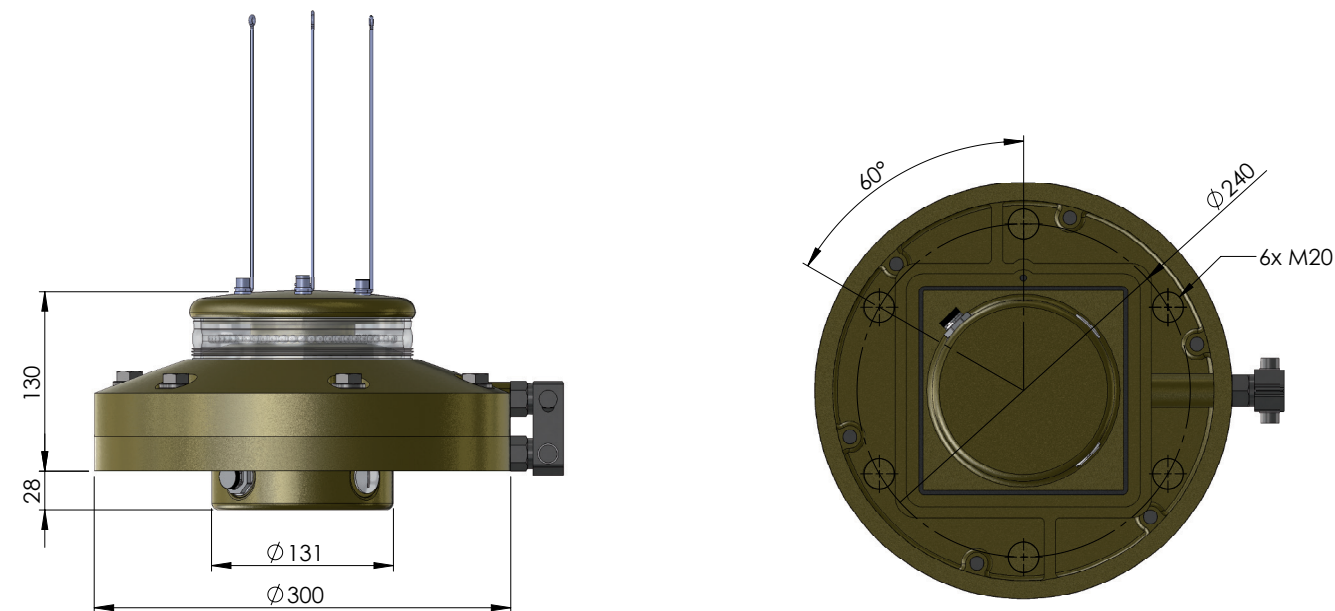


Installation
The lantern is integrated with the buoy top for maximum support against lateral forces.



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

Technical Specification MPV LED



Optical performance

Maximum fixed intensity				
At full power 6 W	120 cd	180 cd	250 cd	100 cd

Main Technical Specification

Lens visual/Mechanical diameter	160 mm
Lens material	UV stabilized Polycarbonate
Light source	Light Emitting Diodes (LEDs)
Vertical divergence (wide lens)	10° @ 50% (±1°) of peak intensity 20° @ 10% (±2°) of peak intensity
Unit lifetime	Up to 10 years
Weight	25 kg
Temperature range	-40°...+60°C
Supply Voltage	10 – 32 VDC
Solar Panel Charger	16 ampere PWM charger
Power consumption	6 watts
Degree of protection	IP 68

Order Overview MPV LED

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

W = Wide (10° @ 50 % of peak intensity)

Red	MPV LED1WR	H = with hinge
Yellow	MPV LED1WY	J = without hinge
Green	MPV LED1WG	
White	MPV LED1WW	

Product code example: MPV LED1WG OPT4

- MPV LED1 is Sabik code for a one tier MPV LED
- WG is the code for a wide lens in green
- with a selection of option 4 GPS sync