

Glamox Series 60 and Series 61

Enduring LED navigation lights with integrated countdown system





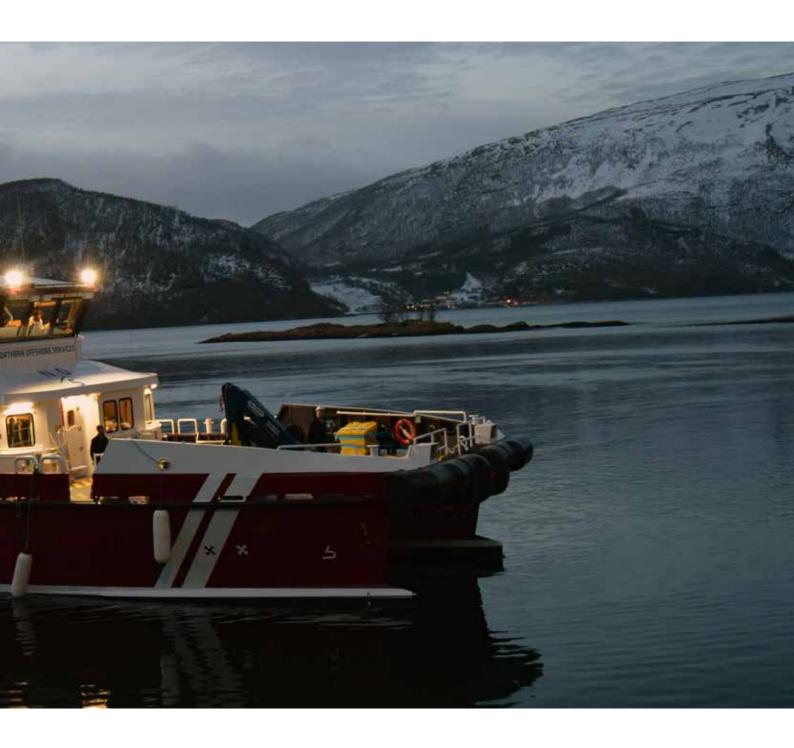
Aqua Signal has been delivering top-of-theline marine lighting solutions since before the age of electricity, providing lighting products designed and manufactured to meet all relevant standards for quality and performance at sea.

Today, Aqua Signal is a world brand, offering a complete range of interior and exterior lighting, including navigations lights, watertight luminaires and other specialized lighting products for marine applications. Aqua Signal products are robust, of superior quality, and may be tailor-made for particular projects.



Enduring LED navigation lights with integrated countdown system

Aqua Signal's Series 60 and Series 61 are LED navigation lights for vessels below and above 50 meters in length. Long product lifetime has been an essential priority when designing the two single tier lanterns. A smart, tamper proof countdown system will also give the user a warning when it's time to replace the lanterns. Even at an ambient temperature at $45\,^{\circ}\mathrm{C}$ the lifetime is $100\,000$ hours.





Long product lifetime

Navigation lights are all about safety. Glamox has developed Series 60 and 61 to make worries about failing lanterns redundant.

The Series 60 and 61 are designed to last for 100.000 hours at an ambient temperature of 45°C. That's twice the lifetime of most competing products. To achieve this kind of longevity the design must be sturdy and all components must be of high quality. This includes high-quality LED driver, driver technology and use of materials such as seawater resistant aluminium, polycarbonate and hardened tempered glass, that can withstand rough weather and varying temperatures. The system lifetime of the LED light source and driver is 11 years given a continuous runtime of 24 hours a day at an ambient temperature of 45°C.



The products have gone through a series of tests including:

- Shock tests (up to 15g, 3-Axes)
- Vibration testing (2.3g for 2 hours)
- Climatic testing (-25°C up to +55°C)
- Salt mist spray tests (level 6 at 1000 hours)
- EMC testing
- Tests for IP rating (Dust and water)



Product range





20-50m Series 60



>50m Series 61



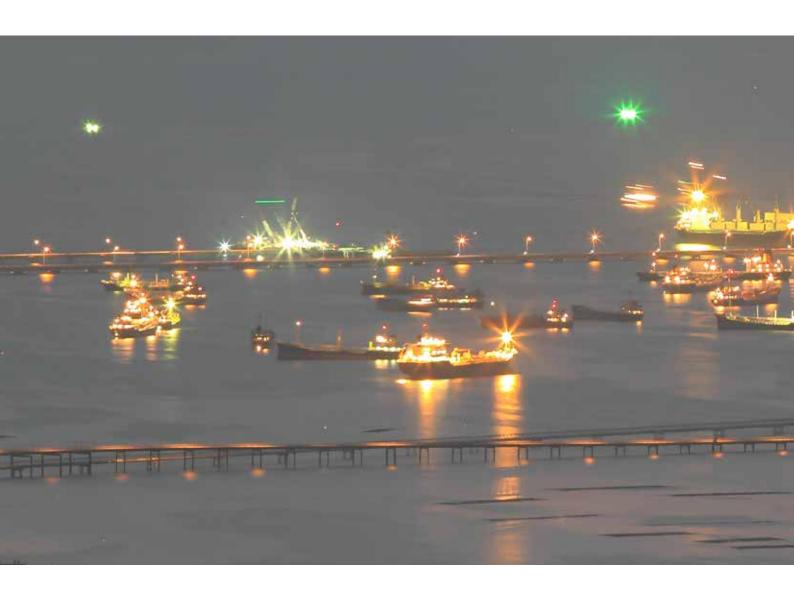






Integrated countdown system

Having a lantern come to end of life or fail while you're at sea is something you don't want to risk. Series 60 and 61 are equipped with a countdown system that will let you know when it's time to replace the navigation light. To make the system tamper proof, the timer is integrated in each lantern while the message is communicated and displayed in the control panel. The system reflects the use of the lantern, whether it is exposed to cold temperatures and harsh weather or conditions with less wear and tear. This system provides added safety for the vessel.



Low Emission

There are strict requirements for electromagnetic computability (EMC) for lanterns that should be installed close to VHF antenna. Our lanterns type 60 and 61 have a low emission level and were tested and comply with the emission and immunity requirements of the IEC 60945.

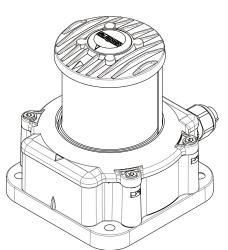
A flexible choice

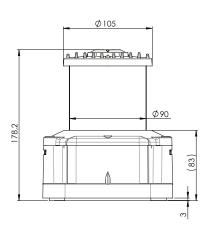
Series 60 and 61 are designed to work with the Aqua Signal Navigation light control panel, but they offer a lot of flexibility because they can be operated with third party panels.* The products are easy to install, only four bolts to fasten. It can be installed upside-down for all variants, with exception of Port, Starboard and Masthead due to visibility angels in COLREG requirements. The internal connection box offers a lot of space for connection wires.

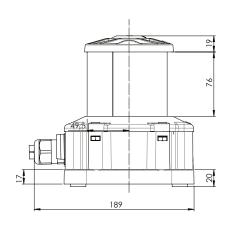
* Compatibility must be confirmed by control panel supplier. For vessels above 50 meters, using Series 61, a dual installation is required (for Masthead, starboard, port and stern). To be according to COLREG requirements.











Technical Data

Voltage supply, main system:

Illuminant:

Permissible ambient temperature for storage and operation:

Protection class:

Dimensions:

Weight of plastic luminaire 24V:

Weight of plastic luminaire 115V-230V:

Cable gland at polycarbonate housing:

Certificates:

115V/230V AC or 24V DC

LED

-25°C $\leq T \leq 55$ °C

IPX6 / IPX7

154 mm × 190 mm × 180 mm

1,5 kg

1,9 kg

Polyamide, for outer cable diameter $9-17~\mathrm{mm}$

Wheelmark, UL (pending), RMRS (pending)

































Main system	S60 Range	Black polycarbonate housing		\$61	Black polycarbonate housing	
		115V /	24V DC	Range >50 m	115V / 230V AC	24V DC
	20-50 m	230V AC				
Port	2 NM	3669205000	3669203000	3 NM	3674205000	3674203000
Starboard	2 NM	3668105000	3668103000	3 NM	3673105000	3673103000
Masthead	5 NM	3666005000	3666003000	6 NM	3671005000	3671003000
Stern white	2 NM	3667705000	3667703000	3 NM	3672705000	3672703000
Stern yellow	2 NM	3667405000	3667403000	3 NM	3672405000	3672403000
Signal white	2 NM	3665705000	3665703000	3 NM	3670705000	3670703000
Signal green	2 NM	3665105000	3665103000	3 NM	3670105000	3670103000
Signal red	2 NM	3665205000	3665203000	3 NM	3670205000	3670203000
Signal white (2x180°)	2 NM	3665705003	3665703003	3 NM	3670705003	3670703003
Signal green (2x180°)	2 NM	3665105003	3665103003	3 NM	3670105003	3670103003
Signal red (2x180°)	2 NM	3665205003	3665203003	3 NM	3670205003	3670203003





Germany

- Glamox Aqua Signal GmbH Bremen Tel +49 421 36 93 52-0 Fax +49 421 36 93 52-210 sales.aquasignal@glamox.com
- LINKSrechts GmbH Gustav-Becker-Strasse 20a 21218 Seevetal/Hamburg Tel: +49 (0) 4105 580 59 0 Fax: +49 (0) 4105 580 59 59 info@linksrechts.de

Norway

Glamox AS BU Glamox International Molde Tel +47 71 25 04 00 Fax +47 71 21 85 40 info.gi@glamox.com

The Netherlands

Glamox B.V. Numansdorp Tel +31 186 653 111 Fax +31 186 654 315 info.nl@glamox.com

Canada

Glamox Inc. St. John's Tel +1 709 753 2373 Fax +1 709 753 2180 sales@glamox.ca

USA

- Glamox Aqua Signal Corporation Houston, Texas Tel +1 (281) 944-4100 Fax +1 (847) 639-7047 glamoxus@glamox.com
- Glamox Aqua Signal Corporation Cary, Illinois Tel +1 (847) 639 6412 Fax +1 (847) 639 7047 customerservice.us@glamox.com

Brazil

Glamox Brasil Iluminação LTDA Niterói RI Tel +55 21 3617 6003 brasil@glamox.com

Singapore

Glamox PTE. LTD Singapore Tel +65 6748 1977 Fax +65 6742 9711 sales@glamoxfe.com.sg

China

- BU Sales China Dalian Tel +86 21 6039 3310 Fax +86 21 6039 3304 info@glamoxcn.com
- BU Sales China Shanghai Tel +86 21 6039 3310 Fax +86 21 6039 3304 info@glamoxcn.com

Korea

Glamox Co. Ltd. Busan Tel +82 51 97 17 200 Fax +82 51 97 19 273 info@glamox.co.kr

Product brands:













Please refer to our website for information about our 5 year warranty.