



ALS 420 ID Floodlight - VM

Fulfills German TF13 Requirements

1:10 Uniform Illumination

Smart Monitoring

NAi Compatibility

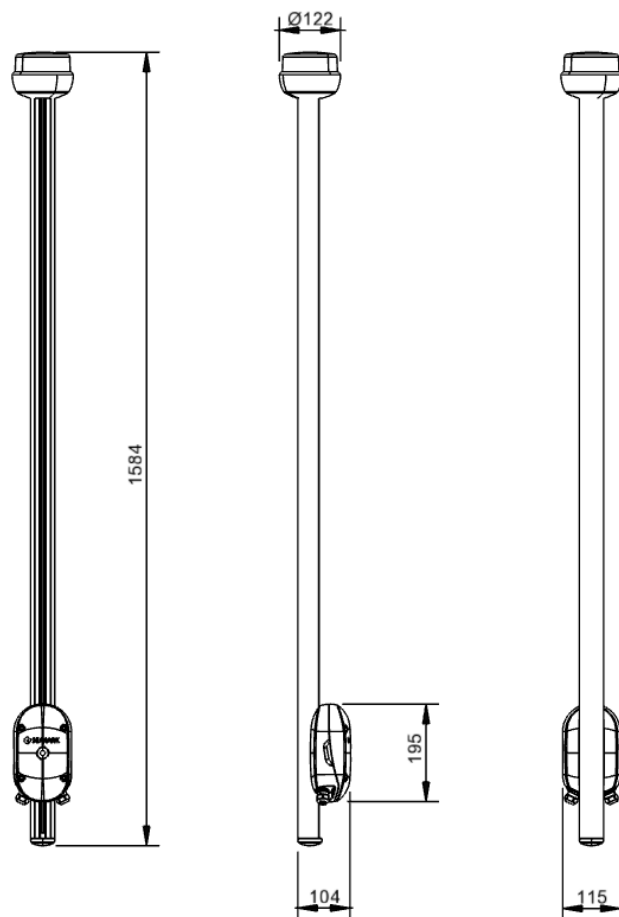
Available in Short Range or Long Range

The **SeaMark ID Floodlight - VM** second generation provides short-range illumination of daytime markings on offshore wind turbine towers and transition pieces. Designed to meet the requirements of German TF13, it delivers the required color consistency, illumination uniformity, and intensity for reliable marking performance.

Built on the SeaMark 2 platform, the floodlight supports both generation 1 and generation 2 NAI communication and can also operate as a stand-alone unit.

Integrated monitoring continuously supervises LED performance, electronics status, supply voltage, temperature, and communication health. In the event of communication loss, the built-in ambient light sensor automatically activates the light based on configurable brightness thresholds, ensuring continued operation and visibility.

Dimensions & Weight



Lantern diameter	122 mm'
Dimensions of Junction Box (width x height)	115 x 195 mm
Aluminum Rod diameter	48 mm
Total Height	1584 mm'
Total Weight (excl. cable)	5 kg'

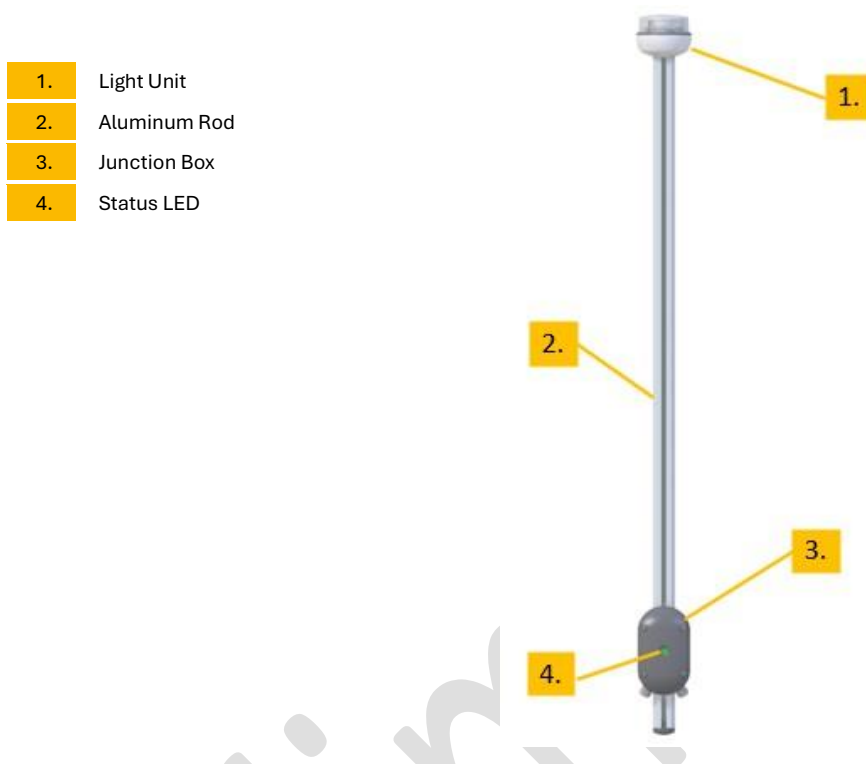
Material

Lantern Base	Seawater resistant aluminum / polycarbonate
Lantern Top	Polycarbonate
Rod	Seawater resistant aluminum
Housing Junction Box	LEXAN™ Resin EXL5689
Gasket	THERMOLAST® K TC3GPZ
EMC Cable Glands	Nickel plated Brass

Optical System

	Short Range	Long Range
Light Colour	3000 K	3000 K
Uniformity [$E_{min} : E_{max}$]	$\geq 1 : 10$	$\geq 1 : 10$
Distance to the surface to be illuminated	1250 ... 2200 mm'	1700 ... 2800 mm'

Components



Note: All housing components including the cable glands satisfy the IP67 degree of protection requirements according to IEC 60529. During connection and assembly, ensure that no moisture or dirt penetrates the open socket.

	Size	For Cable Diameter	Key Width
EMC Cable Gland	M20 x 1.5	8.0 ... 15.0 mm	24 mm

Electrical Connection

Electrical connection	Spring terminal block, max. 2.5 mm ²
Operating voltage V_{IN}	DC 24.0 V (-25% / +25%)
Power consumption (Peak, V_{IN} = DC 24 V)	10 W'



X1 Connector		
1	VPI	Power supply input (Positive)
2	VNI	Power supply input (Negative)
3	DP	NAi data (Positive)
4	DN	NAi data (Negative)
5	VPO	Power supply output (Positive) – to next device
6	VNO	Power supply output (Negative) – to next device
7	DP	NAi data (Positive) – to next device
8	DN	NAi data (Negative) – to next device

Environmental Conditions

Ambient Temperature (operation)	-25 ... 55 °C
Ambient Temperature (storage / transport)	-40 ... 70 °C
Atmospheric Pressure (operation / storage / transport)	80 ... 108 kPa
Degree of Protection (acc. to IEC 60529)	IP66/IP67
Luminaire Classification (acc. to EN 60598-1:2018)	Rough Service Luminaire
Impact Protection (acc. to IEC 62262-1:2018)	IK08
Lightning Protection Zone (acc. to IEC 62305-4:2010)	LPZ0 _B

Electrical Safety & Health

Protection class	Class III
Overvoltage protection	Class III
Pollution degree	3

Reliability

IALA Category	1* (assumed MTTR of 96 h)
MTBF Electronics	974 000 h
Minimum LED Lifetime	100 000 h

* IALA Recommendation R0130 (O-130) Categorisation and Availability Objectives for Short Range AtoN

Compliance

Electromagnetic Compatibility	EN 60945:2002, category "exposed" EN 61547:2009 EN 61000-6-2:2005 EN 61000-6-4:2007 + A1:2011 EN 55015:2013 ETSI EN 303 446-2 V1.2.0 ETSI EN 301 489-1 V2.1.1 FCC Part 15 B GNSS module ETSI EN 301 489-19 V2.1.0 ETSI EN 303 413 V1.1.1
Environmental	EN 60945:2002, category "exposed" IEC 61892-1:2019 EN 60598-1:2015 + A1:2008
Product Safety	EN 60598-1:2015 + A1:2018
Health	EN 62471:2008
Mechanical	EN 60945:2002, category "exposed" EN 60598-1:2015 + A1:2018 IEC 61892-1:2019 IEC 61892-3:2019

Ordering Information

Product ID	Details	Part Number	Order
ALS-420-G2-SR-VM	SeaMark 2 ID Floodlight, Short Range	30380210	Contact your Sabik Offshore sales representative for device with specific cable lengths. sales@sabik-offshore.com
ALS-420-G2-LR-VM	SeaMark 2 ID Floodlight, Long Range	30380220	