

TYPE APPROVAL CERTIFICATE

Certificate No:
TAA00001B6
Revision No:
1

This is to certify:

That the Ship Security Alert System (SSAS)

with type designation(s)
DSAS Mk2

Issued to

Pole Star Space Applications Ltd
London, United Kingdom

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft
ISPS Code - SOLAS Chapter XI-2 Regulation 6 Ship Security Alert System
IMO Resolution MSC.147(77) Revised Performance Standards for a Ship Security Alert System
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids

Application :

See page 2

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2023-04-16**

for **DNV**

This Certificate is valid until **2028-04-15**.

DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Steinar Kristensen**

Frederik Tore Elter
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

DSAS Mk2 Security Alert System, consisting of :

Component	Article no	Software
<ul style="list-style-type: none"> • DSAS Mk2 box, comprising <ul style="list-style-type: none"> ○ Orbcomm Mobile User Equipment ○ Pole Star Circuit - / Charger Board ○ Power pack, 18Ah 	<ul style="list-style-type: none"> ST 6100 PCB-E184 	V184AV16
<ul style="list-style-type: none"> • 2x Alert Activation points (Normally Closed, N/C) 		

The DSAS Mk2 is configured via the Pole Star PurpleFinder® Application web interface

Application/Limitation

The SSAS is to be used according to the manufacturer's guidelines and is not to be used in areas requiring intrinsically safe equipment.

Coverage area:

The DSAS ship security alert system uses an Inmarsat Type Approved ST 6100 IsatData Pro satellite transceiver. Coverage area for SSAS service will be as defined by Inmarsat IsatData Pro service coverage area, approximately corresponding to between 70° North and 70° South.

Type Approval documentation

DNV No	Document ID	Rev.	Description
29	Pole Star Platform User Guide	Issue 1.0	Manual: Pole Star, Pole Star Platform User Guide
27	PS-TN-DSAS-MK2-SIG_V1.3	1.3	Manual: Polestar, DSAS MK2 Ship Security Alert System Installation Guide
26	PS-TN-DSAS-MK2-SIG-UG_V1.2	1.2	Manual: Polestar, DSAS Mk2 Ship Security Alert System, DSAS > DSAS Mk2 Upgrade Guide
25	PS-TN-DSAS-MK2-SIG-BU_1.1	1.1	Manual: Polestar, DSAS Mk2 Ship Security Alert System Battery Upgrade Manual
23	TL18014	Issue 2	Report: MS Testing, EN 60945 Test Report for ST6100 transceiver
21	TL19058-EMC	Issue 2	Report: MS Testing, EMC test report for Polestar DSAS Mk2 Ship Security System
17	Alert Advanced User Guide	Issue 3.0	MANUAL: Pole Star, DSAS Range Alert Advanced User Guide
16	ELS 163378/1/R/ID/12	1	REPORT: SGS, Ingress Protection (IP) test report
11	2012-11-08	2012-11-08	REPORT: Pole Star, DSAS MKII Performance Test Report
8	TL1587-ENV Pole Star	2012-01-27	REPORT: Mariner Systems, Environmental Test report

Tests carried out

- Environmental testing: IEC 60945 (2002) incl. Corr.1 (2008) ^{*)}
- Performance testing: DNV Type Approval Programme No 849.01 for SSAS

^{*)} EMC has also been tested in the range 2 GHz to 6 GHz

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.



Job Id: **262.1-013018-3**
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Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>