



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 28-MAR-2022. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Ship Security Alert System (SSAS)
Model Name(s): DSAS Mk2

Presented to:
EXEGON LTD.
1-3 POULSOM'S YARD
STRATTONS WALK
MELKSHAM
SN12 6JL
United Kingdom

Intended Service:	For use on ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules and International Standards.
Description:	The Pole Star DSAS Mk2 unit is a self-contained vessel tracking system using the Inmarsat IsatData Pro service to provide global coverage. It is provided for the purpose of transmitting a security alert to the shore to indicate a competent authority that the security of a ship is under threat.
Tier:	3
Ratings:	9 - 32V DC input voltage
Service Restrictions:	Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
Comments:	The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. Transmission of security alerts and performance standards are in accordance with IMO Resolution MSC.147(77) recommendations for ship security alert system. Transmission initiated by the security alert includes a unique code/identifier indicating that the alert has not been generated in

accordance with GMDSS distress procedures. The transmission includes the ship identity and current position with a date and time, and is addressed to a shore station, and not addressed to ship stations.

Notes / Documentation:

Drawing No. TL1587-ENV, Mariner Systems ENV Test Report, Revision: 00, Page: 30, Date: 27.01.2012 Drawing No. TL1587-EMC, Mariner Systems EMC Test Report, Revision: 00, Page: 46, Date: 27.01.2012 Drawing No. 40503, PCB-E184 Assembly Drawing, Revision: B, Page: 01 Drawing No. 40503, PCB-E184 Schematic Drawing, Revision: B1, Page: 03, Date: 31.01.2012 Drawing No. QM4105, ISO 9001 Certificate, Revision: Issue 7, Date: 29.09.2016 Drawing No. IDP/SW/004, Inmarsat Type Approval: UE Model: IDP 690, Page: 01, Date: 24.02.2012 Drawing No. IDP/SW/004, IDP 600 Series Data Sheet, Page: 01, Date: 24.02.2012 Drawing No. DSAS Mk2 Hardware Technical Specification, Page: 01, Date: 2.09.2016 Drawing No. QMS EX05, PCB E184 Build Manual V8 BOM, Revision: C, Page: 04, Date: 10.04.2013 Drawing No. DSAS Range Alert Advanced User Guide, Revision: 3.0, Page: 90, Date: 05. 2012 Drawing No. SSAS-DSAS Range Alert Installation Guide, Revision: 1.1, Page: 40, Date: 02.04. 2012

Term of Validity:

This Product Design Assessment (PDA) Certificate 17-LD1613587-PDA-DUP, dated 29/Mar/2017 remains valid until 28/Mar/2022 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules:

- Steel Vessels (2017): 1-1-4/7.7, 1-1-Appendix 3 & 4; 4-1-1/7.15, 4-9-8/3, 4-9-8/7, 4-9- 8/13, 4-9-8/13 Table 1 & Table 2 - Steel Vessels Under 90 Meters (295 Feet) in Length (2017): 1-1-4/7.7, 1-1-Appendix 3 & 4; 4-1-1/37, 4-7-1/5.39, 4-7-2/15.3, 4-7-2 Table1, 4-7-4/3.9 - Offshore Support Vessels (2017): 1-1-4/7.7, 1-1-Appendix 3 & 4; 4-1-1/7.15, 4-9-8/3, 4-9-8/7, 4-9- 8/13, 4-9-8/13 Table 1 & Table 2 - Facilities on Offshore Installations (2016): 1-1-4/9.7, 1-1-A2 & A3; - Mobile Offshore Drilling Units (2017): 1-1-4/9.7, 1-1-A3 & A4; 6-1-1/9, 6-1-1/13; 4-1-1/7.9, 4-3-1/9, 4-3-1/11 - Steel Vessels for Service on Rivers and Intracoastal Waterways (2017): 1-1-4/7.7, 1-1-A3 & A4; 4-1-1/21, 4-5-1/9, 4-5-1/13 - High Speed Crafts (2017): 1-1-4/11.9, 1-1-A2 & A3; 4-1-1/37, 4-6-1/9, 4-6-1/11, 4-7-9/3, 4-7-9/7, 4-7-9/15, 4-7-9 Table 9 & Table 10 - Steel Barge Rules (2017): 1-1-4/7.7, 1-1-A3 & A4;

National Standards:

International Standards:

IACS E10 Rev5: 2006, IEC 60945 Ed4.0:2002

Government Authority:

EUMED:

Others:

Model Certificate	Model Certificate No	Issue Date	Expiry Date
PDA-DUP	17-LD1613587-PDA-DUP	30-MAR-2017	28-MAR-2022



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.