



# DET NORSKE VERITAS

## EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2011/75/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-8029**

This is to certify that the  
**Bridge Navigational Watch Alarm System (BNWAS)**

with type designation(s)  
**BW-800**

Manufacturer  
**Daniamant Electronics A/S**  
**KØBENHAVN -, Denmark**

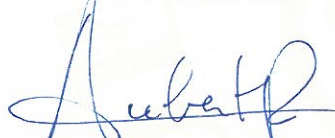
is found to comply with the requirements in the following Regulations/Standards:  
Annex A.1, item No. A.1/4.57 and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation V/18, IMO Res. A.694(17), MSC.128(75) & 191(79)

Further details of the equipment and conditions for certification are given overleaf.

Høvik, 2013-02-27  
for **Det Norske Veritas AS**




This Certificate is valid until  
**2018-02-27**

  
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**Marianne Strand Valderhaug**  
Head of Department

Notified Body No.: **0575**

DNV local office:  
**Copenhagen**

  
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**Roger Lauritsen**  
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-8029  
Item No.: A.1/4.57  
Job Id.: 344.1-003721-1

## Product description

See Appendix.

For latest revision of the Appendix, see <http://exchange.dnv.com/tari>

## Application/Limitation

- Installation to be performed according to the manufactures Product Manual.
- BW-800 may fulfil the additional DNV requirements for BNWAS uses onboard ships with NAUT notifications, depending of system configuration and installation.

## Type Examination documentation

See Appendix.

## Tests carried out

- Performance testing, IEC 62616 (2010)
- Environmental testing, IEC 60945 (2002)
- Serial interface testing, IEC 61162-1 (2010)
- Presentation of Navigation information, IEC 62288 (2008)
- Tests of motion sensor according to DNV Rules Pt.6. Ch.8 and Pt. 6, Ch.20

## Marking of product

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

## Mark of Conformity

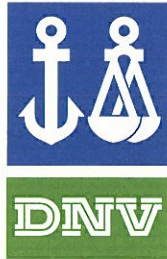
The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.





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## APPENDIX REV. NO. 1 (Page 1 of 1)

BW-800 consisting of the following component:

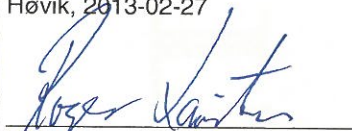
**Hardware modules:**

	Designation	SW ver.	Location
• Bridge Watch main unit	800	1.x	Protected
• Bridge Watch Reset unit	801		Protected
• Bridge Watch Alarm unit	802		Protected
• Bridge Watch Backup Officer selector unit	803		Protected
• Dual Motion Sensor	805		Protected
• Bridge Watch Reset unit for bridge wing	831		Exposed
• Bridge Watch Reset unit with audio alarm for bridge wing	821		Exposed

### Type Approval documentation

DNV No.	Doc Ref.	Description
2	DANAK-1910566	Report: Delta, Type approval testing of Bridge Watch BW-800
6	DANAK 1911798	Report: Delta, EMC and environmental test for reset unit 821 and 831
7	16. Feb. 2010	Report: Uni-Safe, BW-800 Performance Tests
9	E1008900	Report: Nemko, EMC and environmental tests BW-800
21	19. Dec. 2012	Report: Uni-safe, Motion detector 805 supplemental tests
22	Version 1Af	Manual: Instruction and installation manual for BNWAS BW-800

Place and date  
Høvik, 2013-02-27

  
Roger Lauritsen



END OF CERTIFICATE