

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Bridge Navigational Watch Alarm System (BNWAS)

with type designation(s)
NT991 BNWAS

Issued to

Navitron Systems Ltd.
Havant Hampshire, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2017/306,**

item No. MED/4.57. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res. A.694(17), IMO Res. MSC.128(75), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO MSC.1/Circ.1474

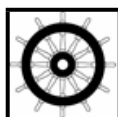
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-01-02.**

Issued at **Hamburg** on **2018-01-03**

DNV GL local station:
Southampton

Approval Engineer:
Jörg Rebel



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudsus
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-007567-1**
Certificate No: **MEDB00003D1**

Product description

The Bridge Navigational Watch Alarm System type NT991 BNWAS consists of the following equipment:

- Main Control / Display Unit: NT991 BNWAS CU, Software Version: 3.xx
- Distribution Unit: NT991 BNWAS DB

Optional

- Remote Reset Unit: NT990 BNWAS RST
- Optional Bridge Visual Alarm Unit: WAS BVA
- Optional Officer Cabin Alarm Unit: WAS CA
- Optional Master Cabin Alarm Unit: WAS MCA
- Optional Final Stage Distr. Unit: WAS ADU
- Optional Final Stage Audible Alarms: 230VAC/100dB = WAS AU1AC or 230VAC/112dB = WAS AU2AC or 24VDC/100dB = WAS AU1DC or 24VDC/112dB = WAS AU2DC
- Optional internal batteries
- Optional PIR Movement Sensor: NT990 BNWAS PIR

Application/Limitation

None

Type Examination documentation

DNV GL No	Document ID	Rev.	Description
1	-	2012-10-02	Report: GL Functional Test
2	2434	2009-04-08	Report: Environmental Test (Vibration, cold, dry, and damp heat)
3	3053	2010-06-17	Report: Environmental Test (Vibration, cold, dry, and damp heat), Part 1
4	3053	2010-06-17	Report: Environmental Test (Vibration, cold, dry, and damp heat), Part 2
5	4459	2012-09-10	Report: Environmental Test (Vibration, cold, dry, and damp heat)
6	09R117 CR	2009-03-23	Report: EMC Test
7	09R117 CC	2009-03-31	Certificate: EMC Test
8	10J234 CR	2010-06-14	Report: EMC Test
9	10J234 CC	2010-05-26	Certificate: EMC Test
10	12S330 CR	2012-09-12	Report: EMC Test
11	12S330 CC	2012-09-12	Certificate: EMC Test
12	5105	2010-06-08	Certificate: Compass Safe Distance
13	C27980	2012-09-03	Report: Compass Safe Distance
14	-	1217/4	Manual: NT991 BNWAS Installation & Technical Manual
17	-	Issue 2, 2017-12-14	Report: BAM interface compliance testing
18	9065 17 31379 157	2018-01-03	Report: Compliance with IEC 62288 ed.2

Tests carried out

- Performance testing: IEC 62616 (2010)
- Environmental testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Serial interface testing: IEC 61162-1 (2010 and 2016), IEC 61162-2 (1998)
- Presentation of navigational information: IEC 62288 (2014)

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Marking of product

According to Article 10 of the Council Directive (MED):

- The wheel mark shall be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- The wheel mark shall be affixed at the end of the production phase.
- The wheel mark shall be followed by the identification number of the notified body, where that body is involved in the production control phase, and by the year in which the mark is affixed.
- The identification number of the notified body shall be affixed by the body itself or, under its instructions, by the manufacturer or the manufacturer's authorised representative.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.

END OF CERTIFICATE