DNV·GL

Certificate No:
MEDG00000KT

CERTIFICATE OF CONFORMITY – EC (MODULE G)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Track control system (TCS)

with type designation and serial number
JRC JAN-7201/9201 ECDIS TYPE Alphapilot MFM (for IMO: 9837925) - LC73920~LC73923 (MFD)

Issued to
Japan Radio Co., Ltd.
Mitaka, Tokyo, Japan

is, by design assessment and product verification, found to comply with
Regulation **(EU) 2018/773,**
item No. MED/4.33. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res A.694(17), IMO Res MSC.74(69), IMO Res MSC.191(79), IMO Res MSC.302(87)

USCG Approval No: **165.112/EC0575/MEDG00000KT**
Further details of the equipment and conditions for certification are given overleaf.

Issued at **Høvik** on **2019-04-24**

DNV GL local station:
Yokohama

Approval Engineer:
Frederik Tore Elter

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

Based on the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of certificates of conformity for marine equipment" signed 17 October 2005, the manufacturer is allowed to affix the U.S. Coast Guard approval number.

0575/yyyy

0575: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed

NORWEGIAN ACCREDITATION PROD 019

The product liability tests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate remains valid unless suspended, withdrawn, recalled or cancelled, provided this equipment is not modified without the acceptance of the notified body named herein.

This certificate authorises the manufacturer to affix the "Mark of Conformity" (wheelmark) to the product described herein.

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Job Id: **344.1-008908-1**
Certificate No: **MEDG00000KT**

Product description

Track Control System (TCS) installed on NB488, consisting of:

ECDIS No. 1, serial number:	LC73923
ECDIS No. 2 (Backup ECDIS) , serial number:	LC73922
Heading Control System, serial number:	31040650V1AE42180034
Software Application ECDIS version:	01.30
Software Application Track Control System in ECDIS:	01.XX

Application/Limitation

- To be installed in accordance to manufacturers specifications consisting of above listed components and serial numbers.
- The installation shall be verified and tested onboard according to manufacturer's installation instructions
- The system complies with the IMO requirements for Category C track control system.
- The equipment identified in the production description shall hold a valid type approval certificate.

Type Examination documentation

DNV GL No.	Title	Document No.	Rev.
47	Interfacing Document: Navis TCS Cat-C Interfacing		V5.15
44	Manual: Alphatron AlphaPilot MFM Operation Manual		V1.6
43	Manual: Alphatron AlphaPilot MFM Installation Manual		V1.6
42	Certificate: ECDIS JAN-9201 MED-B	BABT-MED000062	Issue 8
41	Certificate: ECDIS JAN-7201 MED-B	BABT-MED000061	Issue 8
40	Certificate: AlphaPilot MFM MED-B	MEDB00003V1	
39	Report: Acceptance Test Report AND Result for JRC JAN-7201/9201 ECDIS TCS Type ALPHATRON Alphapilot CAT-C	NA18BN1225H	2019-02-31
23	Manual: E-category C Alphapilot	7ZPNA4749	
22	Manual: JMR-7200 9200series JAN-7201/7202/9201/9202(E)	7ZPNA4466H	

Tests carried out

- Performance – IEC62065 (2014)
- Environmental – IEC60945 (2002 incl. corr.2008)
- Serial Interface – IEC61162-1 (2016)
- Presentation – IEC62288 (2014)

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.