

# Marine Equipment UK Assessment Module B Type Examination Certificate

This is to certify that TUV SUD BABT UNLIMITED did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, under Annex 1 of the listed Amendment of MSN 1874 for the types of equipment identified.

<b>MSN 1874 Amendment</b>	<b>Amendment 5</b>
<b>Certificate Holder and Manufacturer</b>	<b>Northrop Grumman Sperry Marine B.V. 118 Burlington Road, New Malden, Surrey KT3 4NR United Kingdom</b>
<b>Product(s)</b>	<b>VisionMaster FT ECDIS-E</b>
<b>Product Sector</b>	<b>Navigation Equipment</b>
<b>Product Type</b>	<b>UK/4.30 Electronic Chart Display and Information System (ECDIS) with Backup and Raster Chart Display System (RCDS).</b>

and on the basis of the Technical Data and information detailed in the Annex to this certificate.

Valid from: 17 February 2022

(Tom Twynam)

Expiry Date: 12 November 2023

This certificate has been issued in accordance with the TÜV SÜD Testing and Certification Regulations and constitutes page 1 of the combined Certificate and Annex. The Conditions for the validity of this certificate are listed in the Annex. For further details related to this certification please contact [BABT@tuvsud.com](mailto:BABT@tuvsud.com)



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## 1 Equipment Description

Electronic Chart Display and Information System (ECDIS) with Backup, and Raster Chart Display System (RCDS)

### 1.1.1 Processor and Display Options

Part No.	Description
65934AA <sup>Note 1</sup>	ECDIS-E - 24" Display Panel & integrated ECDIS Processor
65934600	Trackball & keypad unit
32SDR011 or 32SDT011	Security Dongle

### 1.1.2 Ancillary Components

Part No.	Description
65800700	AC Isolating switch
Not numbered <sup>Note 2</sup>	C-MAP Dongle
65934610 <sup>Note 3</sup>	Portable DVD Drive
65934615	Serial Port Expander ECDIS-E

### 1.2 Software

Identity	Version
VisionMaster FT Software	15.0.0 <sup>Note 4</sup>
Baseline Operating System	Windows 10 IoT Enterprise LTSC, Version: 1809

## 2 Assessed Requirements

### 2.1 MSN 1874 Amendment 5 Annex 1

### 2.2 Compliance Requirements for UK/4.30<sup>Notes 5, 6, 7 & 8</sup>

IMO Resolutions		International Testing Standards
Resolution MSC.232(82)	IEC 61174:2015	Electronic Chart Display & Information System (ECDIS)
Resolution MSC.191(79)	IEC 62288 (2014)	Maritime navigation and radiocommunication equipment and systems — Presentation of navigation-related information on shipborne navigational displays — General requirements
Resolution A.694(17)	IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)	Maritime navigation and radiocommunication equipment and systems — General requirements
	IEC 61162-1 (2016)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 1: Single talker and multiple listeners
	IEC 61162-2 (1998)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 2: Single talker and multiple listeners, high-speed transmission
	IEC 61162-450 (2018)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 450: Multiple talkers and multiple listeners — Ethernet interconnection

IMO Resolutions		International Testing Standards
Resolution MSC.302(87)	IEC 62923-1:2018	Maritime navigation and radiocommunication equipment and systems – Bridge alert management Part 1: Operational and performance requirements, methods of testing and required test results
	IEC 62923-2:2018	Maritime navigation and radiocommunication equipment and systems – Bridge alert management Part 2: Alert and cluster identifiers and other additional features

As well as the equipment compliance with the requirements listed above this manufacturer has a proven record of software maintenance in conformity with the principles of IMO MSC.1/Circ.1503 Rev.1 (revoking IMO SN.1/Circ.266).

### 3 Technical Documentation

#### 3.1 Declaration of Conformity

DOC074E-UKCA VMFT ECDIS-E

#### 3.2 User Guide

ECDIS-E User Guide Part No. 65934012-7

ECDIS-E Ships Manual Part No. 65934011-6

#### 3.3 Test Reports

IEC 60945:2002 (inc Corr.1)	QinetiQ/D&TS/SS/CR0607592/1.0, 2006-12-06	103230862LHD-001, 2017-12-06
	2011-3475 Rev 01, 2011-11-24	103230862LHD-001 ISS 4, 2018-01-02
	2013-3114 Rev 01, 2013-03-20	416.095.1, 2016-06-17
	65934TASCR Issue 1, 2013-07-26	416.095.2, 2016-05-11
	E13184.00, 2013-08-20	416.095.3, 2016-05-18
	20053, 2013-11-19	962, 2017-03-08
	DOC100732-15-Rev15, 2016-11-10	Declaration of Conformity VL-Gateway 460, 2018-05-18
TR-V15.0.0-NML-090, 2021-12-01	-	
IEC 61174:2015	QinetiQ/EMEA/iX/CR0709724/2, 2008-03-06	VDR Type Approval Evidence Matrix, 2016-03-08
	QinetiQ/MS/EES/TSTR0900779/1.0, 2009-02-24	TR-V11-NML-016 Issue 1, 2018-11-12
	QinetiQ/MS/EES/TSTR0801342/1, 2008-07-30	TR-V12-NML-030 Issue 1, 2019-08-08
	QINETIQ/TEG/TECS/TSTR1101456/1.0, 2011-05-17	TR-V12-NML-031 Issue 1, 2019-08-08
	DOC101028-1, 2011-12-13	TR-V12-NML-032 Issue 1, 2019-08-08
	TR-V10-NML-003 Issue: 3, 2017-10-11	TR-V12.2-NML-038 Issue: 1, 2020-02-20
	TR-V9-NML-001 Issue 3, 2016-12-01	TR-V12.2-NML-044 Issue: 1, 2020-02-20
	TR-V9-NML-002 Issue 1, 2016-10-26	TR-V12.2-NML-043 Issue: 1, 2020-02-20
	TR-V10-NML-006 Issue 2, 2017-09-18	TR-V12.4-NML-053 Issue 01, 2020-09-24
	TR-V12.4-NML-050 Issue 01, 2020-09-24	TR-V12.4-NML-054 Issue 01, 2020-09-25
	TR-V15.0.0-NML-083, 2021-11-30	TR-V15.0.0-NML-084, 2021-12-01
TR-V15.0.0-NML-087, 2021-12-01	-	
IEC 62288:2014	QinetiQ/MS/EES/TSTR0900216/1.0, 2009-02-17	TR-V10-NML-004 Issue 2, 2017-09-18
	DOC101028-1, 2011-12-13	TR-V11-NML-017 Issue: 1, 2018-11-12
	65934TASCR Issue 1, 2013-07-26	TR-V12-NML-028 Issue 2, 2019-09-02
	IEC 62288 Ed 2 Gap Analysis and Impact Assessment Version 1.6, 2015-07-01	TR-V12.2-NML-042 Issue: 1, 2020-02-20
	TR-V12.4-NML-055 Issue: 1, 2020-09-30	TR-V15.0.0-NML-085, 2021-12-01
TR-V15.0.0-NML-085, 2021-12-01	-	
IEC 61162 Series	65934TASCR Issue 1, 2013-07-26	TR-V12-NML-029 Issue 2, 2019-09-02
	20053, 2013-11-19	TR-V12.2-NML-039 Issue: 1, 2020-02-20
	TR-V11-NML-015 Issue 1, 2018-11-12	-
	75952849 Report 02 Issue 01, 2021-12-06	TR-V15.0.0-NML-088, 2021-12-03
IEC 62923 Series	75952849 Report 01 Issue 01, 2021-12-16	-
Miscellaneous	TR-V15.0.0-NML-091, 2021-12-01	-

### 3.4 Build Status

#### 3.4.1 Hardware

VisionMaster FT Technical File VMFTRPRT Issue 16, 2022-02-10

### 3.5 Notes


- Note 1 Where marked this may bear the Jacob Hatteland designation HD 24T21 SEC-M4D-AFB2.
- Note 2 Supplied as part of C-Map chart licensing.
- Note 3 For non-operational use in chart loading & maintenance if not conducted by other media.
- Note 4 This approval remains valid for equipment including subsequent minor software amendments which have been formally accepted in accordance with the TÜV SÜD Testing and Certification Regulations.
- Note 5 The VisionMaster ECDIS-E meets the requirements of IEC 62923-1 for EUT function type P and type R.
- Note 6 The ECDIS was tested with official IHO ENC Test Data using the Seven Cs chart engine and with SENC data supplied as part of C Map chart licensing. ARCS chart test data was used to check RCDS charts.
- Note 7 Conformance with the IHO S-52 'Specifications for Chart Content and Display Aspects of ECDIS' Edition 6.1 and IHO S-52 Annex A 'IHO Presentation Library' Edition 4.0 was demonstrated using IHO S-64 'Instruction Manual for the use of IHO Test Data Sets in ECDIS' Edition 3.0.
- Note 8 Image Transfer to a Voyage Data Recorder via an IEC 61162-450 Interface.
- Note 9 A second ECDIS-E unit is needed to form a back-up system if this is required by carriage requirements and the Administration concerned.
- Note 10 If simultaneous access to a maintained 24V emergency supply is unavailable an Uninterruptible Power Supply (UPS) must be incorporated.

## 4 Conditions of Validity

This certificate ceases to be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with TUV SUD BABT or a person appointed by TUV SUD BABT to perform that role.

Should the specified regulations (international conventions and the relevant resolutions and circulars of the IMO) or standards be amended and enforced through MSN 1874 during the validity of this certificate, the product(s) is/are to be reapproved prior to it/them being placed on the market or onboard vessels to which the amended regulations or standards apply.

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-control phase module (D, E, or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, is fully complied with and controlled by a written inspection agreement with an approved body.

Signature:   
(Thomas J. Twynam)

Date: 2022-02-17

On behalf of TUV SUD BABT UNLIMITED