



Danmark

## Marine Equipment Directive EC Type Examination Module B Certificate

This is to certify that TÜV SÜD Danmark did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Marine Equipment Directive (2014/90/EU) requirements, under the following Implementing Regulation for the listed types of equipment

<b>Implementing Regulation</b>	<b>(EU)2019/1397</b>
<b>Certificate Holder and Manufacturer</b>	<b>ComNav Marine Ltd. Unit 15, 13511 Crestwood Place Richmond British Columbia, V6V 2G1 Canada</b>
<b>EC Representative</b>	<b>SRT Marine Systems SNCF Station 14 rue de Dunkerque 75010 Paris France</b>
<b>Product(s)</b>	<b>X5</b>
<b>Product Sector</b>	<b>Navigation Equipment</b>
<b>Product Type</b>	<b>MED/4.32 Universal automatic identification system equipment (AIS)</b>

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

Valid from: 28 November 2019 (Signature) *M Hardy* Expiry Date: 27 June 2021

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@TUV-SUD.co.uk](mailto:BABT@TUV-SUD.co.uk)



**2443**

Issued by TÜV SÜD Danmark under document number: DK-MED000130 Issue 01

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# Annex to Marine Equipment Directive Module B Type Examination Certificate



## 1 Equipment Description

Marine AIS Class A Transceiver

### 1.1 Models

Model	Description
21410006	X5 AIS Class A Transceiver

### 1.2 Software <sup>Note 1</sup>

Identity	Description
110200.01	AIS modem software
110408.01	MKD software

## 2 Assessed Requirements

### 2.1 Implementing Regulation (EU)2019/1397 <sup>Note 4</sup>

### 2.2 Compliance Requirements for MED/4.32

IMO Resolutions	International Testing Standards	
IMO Res. 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 61162-3 (2008) + A2 (2014)	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 3: Serial data instrument network
IMO Res. MSC.74(69) ITU-R M.1371-5 (2014)	IEC 61993-2 (2012)	Maritime navigation and radiocommunication equipment and systems — Automatic Identification System (AIS) Part 2: Class A shipborne equipment of the universal automatic identification system (AIS)
IMO Res. MSC.191(79)	IEC 62288 (2014)	Maritime navigation and radiocommunication equipment and systems — Presentation of navigation-related information on shipborne navigational displays

## 3 Technical Documentation

### 3.1 Declaration of Conformity

Declaration of Conformity ComNav X5 V2

Dated 2019-11-25

### 3.2 User Guide

201-1007 Apollo User Manual ComNav X5 EN v1

Modified 2019-10-14



# Annex to Marine Equipment Directive Module B Type Examination Certificate

## 3.3 Test Reports

### 3.3.1 IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)

75929063 Report 09 Issue 1	Issued	2016-04-05
APO-2854	Issued	2016-03-30
15R174 CR	Issued	2016-01-21
75929063 Report 02 Issue 1	Issued	2015-06-03
5960	Issued	2015-05-19
TRA-024860-43-00A	Issued	2015-03-17

### 3.3.2 IEC 61162 series

Analysis of IEC61162-1 Ed 5.0 Issue 1	Issued	2019-06-03
Exhibit 24 - NMEA 2000 information	Issued	2016-06-06
BSH/4543/001/4322830/15-1	Issued	2016-03-07

### 3.3.3 IEC 61993-2 (2012)

BSH/4543/001/4322830/15-1	Issued	2016-03-07
75929063 Report 05 Issue 1	Issued	2015-12-16
75929063 Report 06 Issue 1	Issued	2015-12-16
75929063 Report 07 Issue 1	Issued	2015-12-16
BSH/4542/001/4112945/15	Issued	2015-09-21

### 3.3.4 IEC 62288 (2014)

75929063 Report 08	Issued	2016-04-05
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## 3.4 Build Status

### 3.4.1 Hardware

AIS modem PCA hardware version	5.0		
MKD PCA hardware version	5.0		
Apollo Main PCA, Drawing No. 011-0069 Rev 5		Issued	2015-07-12
Apollo MKD Drawing No. 011-0070 Rev 5		Issued	2015-12-07
Apollo Junction Box, Drawing No. 011-0077 Rev 4		Issued	2015-06-22
Apollo SD Card PCB, Drawing No. 011-0083 Rev 2		Issued	2014-10-20

## 3.5 Notes

- Note 1 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 2 Enabling additional features may invalidate compliance with the Marine Equipment Directive. The manufacturer should be consulted before enabling any additional features.
- Note 3 IEC61162-3 (2008) + A2 (2014) Annex A contains details of installation documentation and validation.
- Note 4 (EU)2019/1397 gives a last placing on board date of 29/08/2021 for equipment approved against the test standards listed above. See Conditions of Validity.

# Annex to Marine Equipment Directive Module B Type Examination Certificate



## 4 U.S. Coast Guard Number

This product has been assigned U.S. Coast Guard Module B number

165.155/EC2443

To note type approval to Module B only as it pertains to obtaining US Coastguard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", Decision No. 1/2018 signed February 18th, 2019.

## 5 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 TÜV SÜD Denmark or a person appointed by TÜV SÜD Denmark to perform that role.

Should the specified regulations or standards be amended 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 Annex B of the directive is fully complied with and controlled by a written inspection agreement with a notified body.

Signature: Michelle Hardy

Date: 28<sup>th</sup> November 2019

Print Name: MICHELLE HARDY

On behalf of TÜV SÜD Denmark