



Annex to

Marine Equipment Directive Module B Type Examination Certificate

Description of Equipment

Marine GNSS Receiver system

Model: C-Nav3050

Comprising:

C-Nav3050 GPS Receiver Unit	CNV92-310413-3002LF ^{*1, 2, 3}
ANT3001R Multi-band Antenna	NAV82-001020-3001LF
AC Power adaptor (110-220VAC to 12V DC)	NAV 82-020007-3001LF

Optional:

DC Filtered power lead for 12/24V operation	NAV 94-310274-3010LF ^{*4}
---	------------------------------------

C-Nav is a trademark of C & C Technologies Inc., 730 East Kaliste Saloom Road, Lafayette, LA 70508, USA and is used on these products with their permission.

Compliance Matrix For MED Item A.1/4.14

IMO Resolutions	International Testing Standards	
IMO Res. MSC.112(73)	IEC 61108-1:2003	Maritime navigation and radiocommunication equipment and systems — Global navigation satellite systems (GNSS) — Part 1: Global positioning system (GPS)
IMO Res. A.694(17)	IEC 60945:2002	General Requirements for Marine Navigation Equipment (Inc. Corr1:2008)
IMO Res. MSC.191(79)	IEC 62288:2008*	Maritime navigation and radiocommunication equipment and systems — Presentation of navigation-related information on shipborne navigational displays
	IEC 61162-1: 2010	Maritime navigation and radiocommunication equipment and systems — Digital interfaces Part 1: Single talker and multiple listeners

*The application of this standard is not applicable as the product is not supplied with a dedicated display.

Manufacturer:

Name:	As Holder
Address:	As Holder

Relevant Technical Documentation

User Guide: C-Nav3050 GNSS Product User Guide,
 Part No. CNV96-310034-3001 Rev 9
 Sapphire Technical Reference Manual,
 Part No. 96-312007-3001, Rev.K



Test report numbers: IEC 61108-1: 2003 QINETIQ/MS/EES/TSTR0903827/1
Issue 1, 2009-10-19
IEC 61162-1: 2010 SETG/PVV Test Results, 2012-09-14
96-312007-3001RevG_Sapphire TRM,
2012-09-16
IEC 60945:2002 75906329 Report 01 Issue 4, 2009-10-07
(Inc. Corr1:2008)

Approved Software: Receiver Version 3.5.8.0

Approved Hardware : Overall Build Level V1.2
Circuit Diagram Power IO Board 80-198767-02 Rev A,
dated 2008-12-19
GNSS Board 80-195203-02 Rev A,
dated 2008-11-21

Additional Information:

The products listed on this certificate were originally assessed and certified by QinetiQ under Notified Body number 0191. This certificate recognises software updates and supersedes and replaces QinetiQ Certificate Number QQ-MED-22/09-02R1.

NOTES:-

1. The C-Nav3050 is a 'Black Box receiver within the meaning defined in IEC 61108-1, clause 4.2.2 "GPS black box receiver fed with operational parameters from external devices/remote locations and feeding an integrated system with means of access to the computed position via an appropriate interface, and the positional information available to at least one remote location"
2. The C-Nav3050 provides IEC 61162-1 serial data outputs that will enable the transfer of data such that the provision for display of: Latitude, Longitude, COG, SOG, UTC, RAIM information, HDOP information in accordance with IEC 61108-1:2003 can be met by suitable external displays.
3. This GPS receiver is intended for applications where a survey standard position fixing is required and so has additional facilities for:- L2 reception, GLONASS reception and other processing techniques to enhance the accuracy to greater than the IEC 61108-1 standard requirement.
4. The DC coupling lead is only usable where an isolated (floating) DC supply is available.

U.S. Coast Guard Number :

This product has been assigned U.S. Coast Guard Module B number
165.130/EC0168

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" signed February 27th, 2004



Conditions of Validity

This issue of the Annex to the referenced Marine Equipment Module B Certificate relates to Issue 4 of the Certificate.

This product contains a Bluetooth Module supplied CE marked to the product manufacturer (Testing standards applied: ETSI EN 301 489-17 V1.2.1, ETSI EN 300 328 V1.6.1).

This certificate will not 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 BABT or a person appointed by TÜV SÜD BABT 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 board 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."

Signed: M Hardy
on behalf of TÜV SÜD BABT

Date: 14th July 2015