

## DECLARATION OF CONFORMITY to Directive 2014/53/EU

We, Digital Yacht Ltd, hereby declare that the Product known as AIT1500N2K AIS Class B CSTDMA Transceiver, to which this declaration relates, is in conformity with the relevant sections of the following standards and/or other normative documents.

Standard Reference	Article of Directive 2014/53/EU	Test Report No
EN 60950-1:2006/A2:2013 IEC 60945:2002-08	Health and safety - Article 3.1(a)	B961TR1 B961TR1
IEC 60945:2002-08 EN 301 843-1 v2.1.1	EMC - Article 3.1(b)	17R514 CR 17R514 CR
IEC 62287-2:2017 IEC 61108-1: 2003-07	Radio Spectrum - Article 3.2	B961TR1 B961TR1
IEC 62287-1:2010-11 +A1:2013	Access to Emergency Services - Article 3.3(e)	17R514 CR

We also declare that all essential radio test suites have been carried out and that the above-named product is in conformity with the essential requirements of Directive 2014/53/EU applicable to a Marine Class B CSTDMA AIS Transceiver.

Frequency Range	Power Output	Tolerance
156.025-162.025 MHz	2.113 W	4.0900000000ppm

An internal GNSS antenna, power and data cable are provided to enable the product to operate as intended in line with optimum performance. The AIT1500N2K is pre-loaded with application software v150500.01.

The conformity assessment procedure for Directive 2014/53/EU Articles 3.2 and 3.3 has been followed with the involvement of the following Notified Body:

TUV SUD BABT. Octagon House, Concorde Way, Segensworth North, Fareham, Hampshire PO15 5RL England. Identification mark: 0168.

Signed

Nicholas Heyes

Nicholan Meyry

Chief Executive Officer Digital Yacht Limited

**Digital Yacht Ltd** 6 Farleigh Court Old Weston Road Flax Bourton Bristol, BS48 1UR





## Appendix RF Module Specification

## **AIS Module**

**VHF Transceiver** 

Transmitter: x 1

Receiver: x 2 (Receivers time shared between AIS and DSC)

Frequency: 156.025 to 162.025 MHz in 25 kHz steps

Output Power: CSTDMA 33dBm ± 1.5 dB

Channel Bandwidth: 25kHz Channel Step: 25kHz

Modulation Modes: 25kHz GMSK (AIS, TX and RX)

25kHz AFSK (DSC, RX only)

Bit rates:  $9600 \text{ b/s} \pm 50 \text{ ppm (GMSK)}$ 

1200 b/s ± 30 ppm (FSK)

## **Receiver Performance**

Sensitivity: 107dBm at 20% PER

Co-channel: 10dB Adjacent channel: 70dB IMD: 65dB Blocking: 84dB

