Digital Yacht Ltd
UK Office 01179 55 44 74
www.digitalyachtamerica.com
sales@digitalyacht.co.uk

DECLARATION OF CONFORMITY to Directive 2014/53/EU

We, Digital Yacht Ltd, hereby declare that the Product known as AIT6000 AIS Class B SOTDMA 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 62311:2008	Health and safety - Article 3.1(a)	RSHD200525012-01
EN 60950-1:2006/A2:2013		B961TR1
EN 62368-1:2014 +A11:2017		RSHD200525012-SF
IEC 60945:2002-08		B961TR1
EN 301 489-1 V2.2.3 (2019-11)	EMC - Article 3.1(b)	RSHD200525012-02
EN 301 489-17 V3.2.2 (2019-12)		RSHD200525012-02
EN 301 843-1 v2.1.1		17R514 CR
IEC 60945:2002-08		17R514 CR
IEC 62287-2:2017	Radio Spectrum - Article 3.2	B961TR1
IEC 61108-1: 2003-07		B961TR1
EN 300 328 V2.2.2 (2019-07)		RSHD200525012-01
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 SOTDMA AIS Transceiver with WiFi.

Frequency Range	Power Output	Tolerance
156.025-162.025 MHz	5.34 W	4.0900000000ppm
2412-2472 MHz	48 mW	25ppm

A GNSS antenna, power and data cable are provided to enable the product to operate as intended in line with optimum performance. The AIT6000 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
Chief Executive Officer
Digital Yacht Limited

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

Registered in the UK 04838747

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:	SOTDMA 37dBm ± 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 b/s ± 50 ppm (GMSK) 1200 b/s ± 30 ppm (FSK)

Receiver Performance

Sensitivity:	107dBm at 20% PER
Co-channel:	10dB
Adjacent channel:	70dB
IMD:	65dB
Blocking:	86dB

Wi-Fi Module

TX Frequency:	Wi-Fi: 2412-2472 MHz/2422-2462 MHz Bluetooth/Bluetooth LE: 2402-2480 MHz
RX Frequency:	Wi-Fi: 2412-2472 MHz/2422-2462 MHz Bluetooth/Bluetooth LE: 2402-2480 MHz
ITU Designation:	G1D, D1D, F1D
Output Power:	Wi-Fi: 16.81 dBm (802.11b), 16.78 dBm (802.11g) 16.77 dBm (802.11n20), 16.64 dBm (802.11n40) Bluetooth: 6.02 dBm; Bluetooth LE: 4.42 dBm
Modulation:	Wi-Fi: DSSS, OFDM Bluetooth: GFSK, π/4-DQPSK, 8DPSK Bluetooth LE: GFSK
Antenna:	PCB Antenna, 2.0 dBi