

## 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.

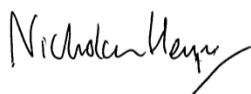
Frequency Range	Power Output	Tolerance
156.025-162.025 MHz	5.34 W	4.0900000000ppm
2412-2472 MHz	48 mW	25ppm

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.

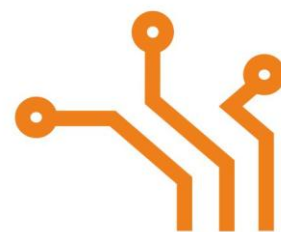
The conformity assessment procedure for Directive 2014/53/EU Articles 3.2 and 3.3 has been followed with the involvement of the following Notified Body:

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



## 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  $\pm$  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  $\pm$  50 ppm (GMSK)  
               1200 b/s  $\pm$  30 ppm (FSK)

##### Receiver Performance

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

#### Wi-Fi Module

<b>TX Frequency:</b>	Wi-Fi: 2412-2472 MHz/2422-2462 MHz Bluetooth/Bluetooth LE: 2402-2480 MHz
<b>RX Frequency:</b>	Wi-Fi: 2412-2472 MHz/2422-2462 MHz Bluetooth/Bluetooth LE: 2402-2480 MHz
<b>ITU Designation:</b>	G1D, D1D, F1D
<b>Output Power:</b>	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
<b>Modulation:</b>	Wi-Fi: DSSS, OFDM Bluetooth: GFSK, $\pi/4$ -DQPSK, 8DPSK Bluetooth LE: GFSK
<b>Antenna:</b>	PCB Antenna, 2.0 dBi

