

EU-type examination (Module B) certificate

No: 172140072/AA/00

In compliance with the procedure specified in RD_061, Telefication declares as designated Notified Body 0560 for the European Radio Equipment Directive, that the stated product, complies with the essential requirements, in accordance with Article 3 of Directive 2014/53/EU, as indicated under Annex 1 of this certificate, based on the applicable Technical Standards and Specifications as listed under Annex 2 of this Certificate.

Product description: **Portable VHF marine radiotelephone (non-GMDSS)**
Trademark: **Sailor**
Type designation: **SP3510**
Hardware / Software version: **60-123533-K / 2.00.xx**
Variants: --

This certificate is granted to manufacturer:

Name: **Thrane & Thrane A/S**
Address: **industrivej 30**
City: **9490 PANDRUP**
Country: **Denmark**

This certificate remains valid as long as the stated product stays in compliance with the essential requirements of the Radio Equipment Directive.

This certificate has THREE Annexes.

Zevenaar, 20 July 2017



Geesje Geers
Product Assessor



General Conditions

For each product to which this EU-type examination relates, it has complied to the essential requirements as follows:

Article 3.1

Radio equipment shall be constructed so as to ensure:

- C (a) The protection of health and safety of persons and of domestic animals and the protection of property, including the objectives with respect to safety requirements set out in Directive 2014/35/EU, but with no voltage limit applying;
- C (b) An adequate level of electromagnetic compatibility as set out in Directive 2014/30/EU.

Article 3.2

- C Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

Article 3.3

Radio equipment within certain categories or classes shall be so constructed that it complies with the following essential requirements:

- NA (a) Radio equipment interworks with accessories, in particular with common chargers;
- NA (b) Radio equipment interworks via networks with other radio equipment;
- NA (c) Radio equipment can be connected to interfaces of the appropriate type throughout the Union;
- NA (d) Radio equipment does not harm the network or its functioning nor misuse network resources, thereby causing an unacceptable degradation of service;
- NA (e) Radio equipment incorporates safeguards to ensure that the personal data and privacy of the user and of the subscriber are protected;
- NA (f) Radio equipment supports certain features ensuring protection from fraud;
- C (g) Radio equipment supports certain features ensuring access to emergency services;
- NA (h) Radio equipment supports certain features in order to facilitate its use by users with a disability;
- NA (i) Radio equipment supports certain features in order to ensure that software can only be loaded into the radio equipment where the compliance of the combination of the radio equipment and software has been demonstrated.

Opinions

- C = Conform
- NC = Not Conform
- NA = Not applicable (for this equipment)
- NP = Not performed (in this statement)

- This EU-type examination certificate is limited to the Radio Equipment Directive.
- This EU-type examination certificate is part of the Conformity Assessment procedure Module B, as described in annex III of the Radio Equipment Directive.
- The validity of this EU-type examination certificate is limited to products, which are equal to the one(s) assessed for this EU-type examination.
- When the manufacturer (or holder of this EU-type examination certificate) is placing the listed products on the European market or the countries of the EEA, he is obliged to label the products with the prescribed CE logo. The CE logo stands for conformity to all applicable Directives. Next to the CE logo the manufacturer has to draw up and issue a Declaration of Conformity, declaring that the product(s) described in this EU type-examination certificate, are in compliance with Directive 2014/53/EU and any other applicable EU harmonization legislation.
- Each product shall be identified by means of type, batch and/or serial numbers and the name of the manufacturer and/or importer.
- If the equipment is to be modified, Telefication shall be notified immediately. Depending on the modifications, Telefication may have additional examinations carried out in consultation with the applicant.
- Enforcement of a new amending directive voids the validity of this EU-type examination certificate.
- In case any referenced standard in this EU-type examination certificate is withdrawn or superseded and the presumption of conformity with the essential requirements has ceased, investigation by Telefication is needed to determine the validity of this EU-type examination.

Remarks and observations

The following conditions are applicable:

This transceiver has been assessed for operation in the marine environment only.

Maximum reported SAR value (25mm front of face): 0.340 W/kg (10g).

Maximum reported SAR value (body-worn with beltclip and leathercase): 0.198 W/kg (10g).

ATIS functionality incorporated; selectable by programming software where required.

The following accessories may be used in conjunction with the equipment:

- SAILOR 3590 Hand microphone.
- SAILOR 3595 Hand microphone.
- interface cable Savox 400E in combination with Savox Noise-com NC/400 headset or the Helmet unit HC-E;
- interface cable Savox C500 in combination with Savox NC/400 headset, Savox HC-E helmet unit or Savox HC1 helmet unit;
- interface cable Peltor FL5214 in combination with Peltor MT7H79 headset.

Documentation lodged for this EU-type examination

Test Reports:

- Telefication B.V.: 99788830, 28 March 2007
- Telefication B.V.: 99788831, 29 March 2007
- Telefication B.V.: 99822220, 03 April 2007
- Telefication B.V.: 99822250, 26 April 2007
- Nemko A/S: E11128.00, 01 August 2011
- Nemko A/S: 180514, 11 April 2012
- IMST GmbH: Nemko 6620-671, 11 January 2008
- Thrane & Thrane A/S: 96-141778-A, 10 April 2014
- Delta: DANAK-19/18030, 26 June 2017

Product Documentation:

- Assembly drawings
- Bill of materials
- Block diagram
- Electrical diagrams
- Internal photos
- External photos
- Label and label placement
- Risk assessment
- RED declarations

Technical Standards and Specifications

The product is compliant with:

EN 300 698	August, 2016	V2.1.1
EN 301 178	March, 2017	V2.2.1
EN 301 489-1	September, 2011	V1.9.2
EN 301 489-5	August, 2002	V1.3.1
EN 301 843-1	March, 2016	V2.1.1
EN 301 843-2	March, 2016	V2.1.1
EN 60945	October, 2002	Edition 4
EN 60950-1	2006	
EN 60950-1/A1	March, 2010	
EN 60950-1/A11	March, 2009	
EN 60950-1/A12	February, 2011	
EN 60950-1/A2	August, 2013	
EN 62209-1	July, 2006	
EN 62209-2	June, 2010	

Technical features and characteristics

The product includes the following features and characteristics:

VHF equipment

- Operating frequency range: TX: 155.000-161.450MHz; RX: 155.000-163.425MHz
- Modulation method(s): 16K0G3E, 16K0G2B
- Maximum output power: 5W, 1W rated
- Channel separation: 25 kHz; ATIS-facility; Battery: rechargeable Lithium-ion 1800 mAh.

The product as described in this EU-type examination includes the following type designations:

- Product description: Portable VHF marine radiotelephone (non-GMDSS)
- Trademark: Sailor
- Type designation: SP3510
- Hardware version: 60-123533-K
- Software version: 2.00.xx