

Certificate

Of

EC Type-examination (Module B)

Certificate No.: 12212002/AA/01

Product Category: A.1/5.1; A.1/5.2

With respect to Marine Equipment Directive 96/98/EC and the amending Directive 2011/75/EU,
Telefication declares that the equipment:

Product description: **VHF radiotelephone with integrated DSC & ch70
watch keeping receiver**
Trademark: **FURUNO**
Family name: --
Type designation: **FM-8900S**
Serial No: --
Software release No.: **0550249-01.xx**

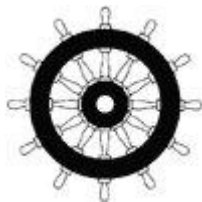
Manufacturer: **Furuno Electric Co., Ltd.**
Address: **9-52 Ashihara cho**
City: **662-8580 Nishinomiya**
Country: **Japan**

complies with the international instruments and test standards as listed in the Annex.
This certificate is granted to:

Name: **Furuno Electric Co., Ltd.**
Address: **9-52 Ashihara cho**
City: **662-8580 Nishinomiya**
Country: **Japan**

Validity of this certificate is 5 years; **Expiry date: 15 May 2017**
This certificate has THREE Annexes.

Zevenaar, 05 October 2012



i.o. 

W.J.M. Jong
Manager Product Certification



General conditions

- Each product to which this certificate relates shall be provided with Marine markings. The Marine marking consist of symbol in the form of a wheel followed by the identification number of the responsible Notified Body for module D, E, F or G, and by the last two digits of the number of the year in which the mark is affixed.
- The holder of this Certificate has drawn up a Declaration of conformity to type with Directive 96/98/EC and amending Directives, declaring that the product(s) described in this EC Type-examination certificate, satisfy the requirements that apply to them.
- 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 certificate for (re)placement of the product onboard ships.

Remarks and observations

The following conditions are applicable:

Equipment complies with ATIS when channel-set for Europe Inland Waterways has been chosen. Instead of category exposed as defined in EN 60945, the remote station RB-8900-W has been tested for dust (IP5X) and rain/spray (IPX6) according to IEC 60529.

System related equipment

The product to which this certificate relates includes to following units or equipment:

- FM-8900S: VHF Radiotelephone, simplex, semi-duplex
- HS-2003: Handset
- HS-6000: Handset
- HS-8900: Remote handset
- IF-8900: Junction box
- RB-8900: Remote station
- HG-8900: Handset hanger
- RB-8900-W: Watertight Remote station (IP56 - IEC 60529)
- HS-8900-W: Watertight Remote handset (IP56 - IEC 60529)
- HG-8900-W: Watertight Handset hanger (IP56 - IEC 60529)
- IC-350: Alarm unit
- PP-510: Printer
- PP-520: Printer
- PP-8800A: Printer
- IF-8500: Printer interface
- PR-240: AC/DC Power supply unit
- PR-300: AC/DC Power supply unit
- RBD-VHF(B): Microphone receptacle box
- SEM-21Q: External loudspeaker
- RC-8900: VHF console

Documentation lodged for this EC type-examination*Test Reports:*

- Furuno Labotech International Co. Ltd.: FLI 12-06-057, 10 November 2006
- Furuno Labotech International Co. Ltd.: FLI 12-11-012, 29 February 2012
- Furuno Labotech International Co. Ltd.: FLI 12-11-013, 29 February 2012
- Furuno Labotech International Co. Ltd.: FLI 12-11-131 Rev. 2, 12 March 2012
- Furuno Labotech International Co. Ltd.: FLI 12-12-061, 13 April 2012
- Furuno Labotech International Co. Ltd.: FLI 12-12-081, 05 September 2012
- RES Laboratory Ltd.: N 17.11, 26 December 2011
- RES Laboratory Ltd.: N 17.11 Amendment 1, 26 December 2011
- RES Laboratory Ltd.: N 17.11 Amendment 2, 26 December 2011
- RES Laboratory Ltd.: N 17.11 Amendment 3, 26 December 2011
- Telefication B.V.: 20114676300 rev 2.0, 29 March 2012
- Telefication B.V.: 20114676301 rev 1.0, 26 March 2012
- TÜV Rheinland Japan Ltd. Yokohama Laboratory: 12603045 001, 27 November 2006

Product Documentation:

- Assembly drawings
- Bill of materials
- Electric diagrams
- Photos
- User manual
- Installation Manual
- Corrosion test waiver

International instruments and test standards*The equipment complies with:*

- EN 300 338-1: February, 2010, V1.3.1
- EN 300 338-2: February, 2010, V1.3.1
- EN 301 033: September, 2010, V1.3.1
- EN 301 843-2: June, 2004, V1.2.1
- EN 301 925: September, 2010, V1.3.1
- IEC 60529: 2001, Ed. 2.1
- IEC 60945: August, 2002, Edition 4
- IEC 60945/Corrigendum 1: April, 2008, Edition 4
- IEC 61162-1: November, 2010, Ed. 4.0
- IEC 62288: July, 2008, Ed. 1.0
- IMO Resolution A.385(X): 1977
- IMO Resolution A.524 (13): 1983
- IMO Resolution A.694(17): 1991
- IMO Resolution A.803(19): 1995
- ITU-R M.489-2: October, 1995
- ITU-R M.493-13: October, 2009
- ITU-R M.541-9: May, 2004
- ITU-R M.689-2: September, 1994
- ITU-R M.821-1: February, 1997
- MSC Resolution 68(68)/A1: 1997
- MSC Resolution Cir. 862: 1998

Technical features and characteristics

The product includes the following features and characteristics:

VHF equipment (simplex, semi-duplex):

- Operating frequency range: 155.0-164.2 MHz (RX); 155.0-161.475 MHz (TX)
- Modulation method(s): 16K0G3E; 16K0G2B
- Maximum output power: 25 W; 1W rated
- DSC classification: class A
- Integrated channel 70 watchkeeping receiver

Trademarks and Type designations

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

- Product description: VHF radiotelephone with integrated DSC & ch70 watch keeping receiver
- Trademark: FURUNO
- Type Designation: FM-8900S
- Software version: 0550249-01.xx