



# TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MERB0000898**  
Revision No:  
**0**

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

## This is to certify:

**That the MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony**

with type designation(s)  
**FS-1575**

Issued to

**Furuno Electric Co., Ltd.**  
**Nishinomiya, Japan**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 6,**

**item No. UK/5.14. SOLAS 74 as amended Reg.IV/10,14 & X/3,IMO Res.A.694(17),806(19),IMO**

**Res.MSC.36(63),97(73),302(87),MSC/Circ.862,1460,IMO COMSAR Circ.32,ITU-R M.476-5(10/95),492-6(10/95),493-15(01/19), 541-10(10/15),625-4(03/12),1173-1(03/12)**

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-08-12**.

Issued at **London** on **2023-02-20**

for **DNV UK Ltd.**

DNV local unit:  
**Kobe**

Approval Engineer:  
**Steinar Kristensen**

**Christine Mydlak-Röder**  
**MER Service Responsible**



Maritime &  
Coastguard  
Agency

UK Approved Body Authorised  
by the MCA

The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV UK Ltd. of any changes to the approved equipment. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

The FS-1575 is a 150W GMDSS MF/HF SSB Radiotelephone with integrated Class A DSC-controller, NBDP terminal and DSC Watch-keeping receiver, consisting of the following units:

Unit	Type/Part no.	Comment/ Description	Location
Control Unit	FS-2575C	MF/HF simplex/ semi-duplex radiotelephone control unit with 4,3" LCD user interface and bracket mount.  Interfaces: <ul style="list-style-type: none"> <li>• 24V DC input power</li> <li>• Transceiver unit</li> <li>• External speaker</li> <li>• Handset</li> <li>• Printer interface</li> <li>• NBDP terminal unit</li> </ul>	Protected
Transceiver unit	FS-1575T	Interfaces: <ul style="list-style-type: none"> <li>• 24V DC input power</li> <li>• Antenna coupler</li> <li>• DSC Ant. preamplifier</li> <li>• BK Interface</li> <li>• Alarm Unit</li> <li>• RS422 NMEA in/out</li> </ul>	Protected
Handsets	HS-2003		Protected
Antenna coupler	AT-1575-AES or AT-1575-SUS	Acrylonitrile ethylene styrene cabinet  Austenitic stainless steel cabinet	Exposed
<b>Accessories</b>			
Alarm Unit	IC-350		Protected
Terminal Unit	IB-583 or IB-585	NBDP terminal unit	Protected
Keyboards	G84-4100PPAUS or SKB-E3U or SKB-E3UN or 5139U or TK-HG01UMBK or TK-HG01UMBK-P	5139U is to be applied with IB-585 TK-HG01UMBK is without conversion connector TK-HG01UMBK-P is with conversion connector	Protected
Printer	PP-510 or PP-520		Protected
Printer Interface	IF-8500		Protected
Preamplifier	FAX-5	Pre-amplifier for 2.6m active whip antenna for Watch-keeping receiver	Protected
Power Supply	PR-240 or PR-241 or PR-300 or PR-850AR	AC/DC Power Supply Unit	Protected
Speaker	SEM-21Q	External loudspeaker	Protected
Interface	BK-300	BK interface	Protected
Antenna switch	AS-102	Automatic antenna switch	Protected

Location specifies the location for the units according to IEC 60945 (2002).

### Software modules

	Version
• FS-1575T	0550243-03.xx
• FS-2575C	00550246-01.xx
• ATU	0550244-01.xx
• NBDP:	0550251-02.xx (IB-585), 055209-01.xx (IB-583)

### Application/Limitation

The following applies for the FS-1575 MF/HF radiotelephone:

- Shall be installed according to manufacturer's User & Installation Manual.
- Operating frequency range: 0.1-30 MHz (Rx), 1.6-27.5 MHz (Tx)
- Modulation methods: J3E, J2B
- Maximum output power: 150W PEP (J3E), 150W mean (J2B) rated
- DSC classification: Class A and 6 channels scanning watchkeeping receiver.
- NBDP-operation with single optional scanning receiver.

### Type Examination documentation

DNV No	Document ID	Rev.	Description
1	IME-56770-R1	2022-04-06	Manual: Furuno, Installation Manual for SSB Radiotelephone Model FS-1575/FS-2575/FS-5075
2	20104309302	2011-07-01	Report: Telefication, Radio Test report based on EN 300 373-1 V1.3.1 for FS-5075
3	20104309303	2011-07-01	Report: Telefication, Radio Test report based on EN 300 338-1 V1.3.1, EN 300 338-2 V1.3.1 and EN 301 033 V1.3.1 for FS-5075
4	20104309305	2011-07-01	Report: Telefication, Radio Test report based on ETS 300 067 (1990) incl A1 (1993) for FS-5075
5	20114676303	3.0	Report: Telefication, Radio Test report based on EN 300 373-1 V1.3.1 for FS-1575
6	20114676304	3.0	Report: Telefication, Radio Test report based on EN 300 338-1 V1.3.1, EN 300 338-2 V1.3.1 for FS-1575
7	20114676305	3.0	Report: Telefication, Radio Test report based on ETS 300 067 (1990) incl A1 (1993) for FS-1575
8	FLI 12-06-049	2006-12-13	Report: Labotech, IEC 60945 test report for PR-850AR Power Supply Unit
9	FLI 12-11-058	2012-03-19	Report: Labotech, IEC 61162-1 (2010) test report for SSB Radiotelephone FS-5075/FS-2575/FS-1575
10	FLI 12-12-014	2012-03-02	Report: Labotech, IEC 60945 test report for SSB Radiotelephone FS-1575
12	FLI 12-12-017	2012-02-29	Report: Labotech, EN 300 373-1 V1.3.1 Spurious emission test report for SSB Radiotelephone FS-1575
13	FLI 12-12-081	2012-09-05	Report: Labotech, IEC 60945 test report for PP-520 Printer
14	08.11 Amd.1	2011-05-06	Report: RES Laboratory Ltd, ETSI EN 300 338-1 V1.3.1 and IEC 61162-1 Ed.4 test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075
15	08.11 Amd.2	2011-05-06	Report: RES Laboratory Ltd, ETSI EN 300 338-1 V1.3.1 (clause 10) test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075
16	08.11	2011-05-06	Report: RES Laboratory Ltd, ETSI EN 300 338-1 V1.3.1, EN 300 338-2 V1.3.1, ITU-R M.493-13(2009), ITU-R M.541-9(2004) and IEC 61162-1 Ed.3 test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075 MF/HF DSC class A
17	09.11	2011-05-06	Report: RES Laboratory Ltd, ETS 300 067 (1990) incl. A1(1993), ITU-R M.625-3 (95), ITU-R M.476-5(95), IMO Res. A.806(19) test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075/NBDP IB-583
18	10.11	2011-05-06	Report: RES Laboratory Ltd, ETS 300 067 (1990) incl. A1(1993), ITU-R M.625-3 (95), ITU-R M.476-5(95), IMO Res. A.806(19) test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075/NBDP IB-583 (Cyrillic)
19	LIC 12-15-129	2015-11-19	Report: Labotech, IEC 61162-450 Ed.1 test report for MF/HF Radiotelephone FS-1575/FS-2575/FS-5075
20	LIC 12-18-106	2018-12-13	Report: Labotech, IEC 61162-1 Ed.5 test report for MF/HF Radiotelephone FS-1575/FS-2575/FS-5075
21	LIC 12-18-109	2018-12-13	Report: Labotech, ETSI EN 301 843-1 V2.2.1, EN 301 843-5 V2.2.1 EMC test report for MF/HF Radiotelephone FS-1575
22	LIC 12-20-051	2020-05-07	Report: Labotech, IEC 60945 Compass safe distance test report for SKB-E3U Keyboard
23	LIC 12-20-052	2020-05-07	Report: Labotech, IEC 60945 EMC test report for SKB-E3U Keyboard
24	LIC 12-20-053	2020-05-07	Report: Labotech, IEC 60945 Temperature and vibration test report for SKB-E3U Keyboard
25	LIC 12-20-119	2020-10-22	Report: Labotech, IEC 60945 Compass safe distance test report for PR-241 Power supply unit

DNV No	Document ID	Rev.	Description
26	LIC 12-20-120	2020-10-22	Report: Labotech, IEC 60945 EMC test report for PR-241 Power supply unit
27	LIC 12-20-121	2020-10-22	Report: Labotech, IEC 60945 Temperature and vibration test report for PR-241 Power supply unit
28	LIC 12-20-122	2020-10-22	Report: Labotech, IEC 60945 Excessive conditions, acoustic noise and dangerous voltage test report for PR-241 Power supply unit
29	LIC 12-20-192	2021-01-12	Report: Labotech, IEC 60945 EMC test report for TK-HG01UMBK Keyboard
30	LIC 12-20-193	2021-01-12	Report: Labotech, IEC 60945 Compass safe distance test report for TK-HG01UMBK Keyboard
31	LIC 12-20-194	2021-01-12	Report: Labotech, IEC 60945 Temperature and vibration test report for TK-HG01UMBK Keyboard
32	LIC 12-21-069	2021-06-14	Report: Labotech, IEC 61162-450 Ed.2 test report for MF/HF Radiotelephone FS-1575/FS-2575/FS-5075
33	15.21	2021-09-13	Report: RES Laboratory Ltd, Bridge Alert Management test report for MF/HF DSC Class A FS-1575/FS-2575/FS-5075
34	17.21	2021-10-27	Report: RES Laboratory Ltd, ITU-R M.493-15(2019) and IMO Res A.806(19) test report for MF/HF DSC Class A FS-1575/FS-2575/FS-5075
35	02.19	2019-01-31	Report: RES Laboratory Ltd, ETSI EN 300 338-1 V1.4.2, EN 300 338-2 V1.4.1, ITU-R M.493-14(2015), ITU-R M.541-10(2015), IEC 61162-1 Ed.5, IMO Res. A.806(19) test report for FS-1575/FS-2575/FS-5075
36	13.16	2016-09-06	Report: RES Laboratory Ltd, ETSI EN 300 338-1 v1.3.1, EN 300 338-2 V1.3.1, ITU-R M.493-14(2015), ITU-R M.541-10(2015), IEC 61162-1 Ed.4, IMO Res. A.806(19) test report for MF/HF DSC Class A FS-1575/FS-2575/FS-5075
37	20.11	2011-12-26	Report: RES Laboratory Ltd, ETSI EN 300 338-1 v1.3.1, EN 300 338-2 V1.3.1, ITU-R M.493-13(2009), ITU-R M.541-9(2004), ITU-R M.1082-1(1997) test report for MF/HF DSC Class A FS-1575/FS-2575/FS-5075
38	18.11	2011-12-26	Report: RES Laboratory Ltd, ETS 300 067 (1990) incl. A1(1993), ITU-R M.625-3 (95), ITU-R M.476-5(95), IMO Res. A.806(19) test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075/NBDP IB-585
39	19.11	2011-12-26	Report: RES Laboratory Ltd, ETS 300 067 (1990) incl. A1(1993), ITU-R M.625-3 (95), ITU-R M.476-5(95), IMO Res. A.806(19) test report for SSB Radiotelephone FS-1575/FS-2575/FS-5075/NBDP IB-585 (Cyrillic)
40	OME-56770-M	2022-06-15	Manual: Furuno, Operator's Manual for SSB Radiotelephone FS-1575/FS-2575/FS-5075

### Tests carried out

- Performance tests: ETSI EN 300 338-1 V1.4.2  
ETSI EN 300 338-2 V1.4.1
- EMC and radio test: ETSI EN 300 373-1 V1.4.1  
ETSI EN 301 843-5 V2.2.1  
ETSI ETS 300 067 (1990) incl. A1 (1993)
- Environmental tests: IEC 60945 (2002) incl. Corr.1 (2008)
- Interface tests: IEC 61162-1 (2016) and IEC 61162-450 (2018)
- Bridge Alert Management: IEC 62923-1 (2018) and IEC 62923-2 (2018)

### Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.