

Certificate

of

EC type-examination

Nº: 02212011/AA/00

With respect to Marine Equipment Directive 96/98/EC and the amending Directive 2002/75/EC,
Telefication declares that the equipment:

Product description:	A.1/5.13 Inmarsat-C satellite earth station
Trademark:	Furuno
Family name:	--
Type designation:	Felcom 15
Serial N°:	3533-0001; 3533-0010
Software release N°:	--
Manufacturer:	Furuno Electric Co., Ltd.
Address:	9-52 Ashihara Cho
City:	662-8580 Nishinomiya City
Country:	Japan

and with respect to the Production Quality System Approval
issued under number: **P112, module D**

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 City
Country:	Japan

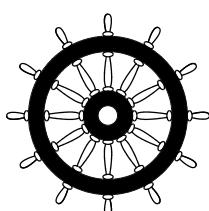
This certificate has TWO Annexes.

Zevenaar, 29 November 2002

drs. ir. W.B.A. Blom
Director Telefication



Accredited by the
Dutch Accreditation Council



laboratory

certification

approvals

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 Telefication (i.e. 0560), 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, 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.

Remarks and observations

The following conditions are applicable:

- N/A

Documentation lodged for the EC type-examination

Testreports:

- Labotech: FLI 12-02-047, 25 November 2002
- Labotech: FLI 12-02-048, 12 November 2002
- Furuno: SB-2236, 7 November 2002

Product documentation:

- Bill of materials
- Electric diagrams
- Installation manual
- Photos
- User manual
- Inmarsat Type Approval Particulars Certificate N°: IT-04-089-1, 18 November 2002

International instruments and test standards

The equipment complies with:

- EN 60945 1997 Third edition
- EN 61162-1 July 2000
- IEC 61097-4 November 1994

IMO Resolutions:

- MSC.36(63)
- A.570(14)
- A.664(16)
- A.694(17)
- A.807(19)
- MSC.97(73)
- MSC/Cir.862

Technical features

The product includes the following features:

- Receiving frequency range: 1530.0 to 1545.0 MHz
- Sending frequency range: 1626.5 to 1646.5 MHz
- Maximum RF output power: 12 to 16 dBW EIRP
- Modulation method(s): BPSK

System related equipment

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

- IC-115: Antenna Unit
- IC-215: Terminal Unit
- IC-305: Distress Alert/ Received Call Unit
- IC-306: Alarm Unit
- IC-315: Junction Box
- OP16-24: GPS Receiver
- PP-505: EGC Printer
- PP-510: Printer
- PR-240-CE: AC/DC Power Supply Unit
- BTC-5100C PS/2: Keyboard