

## EU-type examination (Module B) certificate

No: 162140070/AA/02

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: **INMARSAT MINI-C MES**  
Trademark: **FURUNO**  
Type designation: **FELCOM19**  
Software version: **PCTERMINAL: 1650241-01; IC-219: 1650248-01**

This certificate is granted to manufacturer:

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

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, 11 September 2020



Ramy Nabod  
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;
- NA (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.

## Legend

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

- 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 and C, 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:

AA/02: Update standard

AA/01: Update standard

Optional SSAS functionality has been tested in accordance with Resolution MSC.147(77).

Optional LRIT functionality has been tested in accordance with SOLAS Chapter V/19-1 and Resolution MSC.263(84).

The system consists of the following units or equipment:

- IC-219: Communication unit
- IC-119: Antenna unit
- IC-318: Junction box
- IC-307: SSAS Alert unit (optional)

## Documentation lodged for this EU-type examination

### Test Reports:

- RES Laboratory Ltd.: N 15.12, 26 April 2012
- RES Laboratory Ltd.: N 14.12, 26 April 2012
- Furuno Labotech International Co. Ltd.: FLI 12-12-036, 05 April 2012
- Furuno Labotech International Co. Ltd.: FLI 12-12-039, 13 April 2012
- Furuno Labotech International Co. Ltd.: FLI 12-12-040, 28 March 2012
- Labotech International Co., Ltd.: LIC 12-19-086 , 29 May 2019
- Labotech International Co., Ltd.: LIC 12-20-017, 07 April 2020

### Product Documentation:

- Assembly drawings
- Bill of materials
- Electrical diagrams
- Internal photos
- External photos
- Manual
- Label and label placement
- Test setup photos
- Risk assessment
- Packaging information
- RED declarations
- Installation manual
- Inmarsat certificate: 4FE089, issued: 23 April 2012

## Technical Standards and Specifications

The product is compliant with:

IEC 60945	August, 2002	Edition 4
IEC 60950-1	December, 2005	
IEC 60950-1/A1	December, 2009	
IEC 60950-1/A2	May, 2013	
IEC 61097-4	August, 2016	Ed. 3.1
IEC 61162-1	August, 2016	Ed. 5.0
IEC 62368-1	October, 2018	Ed. 3.0
MSC Resolution 263(84)	May, 2008	

## Technical features and characteristics

The product includes the following features and characteristics:

### **Satellite Earth Station**

- Operating frequency range: RX: 1537.0-1544.2 MHz; TX: 1626.5-1646.5 MHz
- Modulation method(s): BPSK
- Output power: 7 to 16 dBW EIRP rated

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

- Product description: INMARSAT MINI-C MES
- Trademark: FURUNO
- Type designation: FELCOM19
- Software version: PCTERMINAL: 1650241-01; IC-219: 1650248-01