

CERTIFICATE

of
EC Type-examination (Module B)

Certificate No: 13212002/AA/06

Product Category: A.1/5.17

With respect to Marine Equipment Directive 2014/90/EU and the amending Directive (EU) 2015/559,
Telefication declares that the equipment:

Product description: **Portable Survival craft VHF radio telephone**

Trademark: **Entel**

Type designation: **HT649**

Hardware / Software version: **V6.0 / V3.2.0.0**

Variants: **--**

Manufacturer: **Entel UK Limited**

Address: **320 Centennial Avenue, Centennial Park, Elstree**

City: **WD6 3TJ Borehamwood**

Country: **UNITED KINGDOM**

Complies with the international instruments and test standards as listed in the Annex.

This certificate is granted to:

Name: **Entel UK Limited**

Address: **320 Centennial Avenue, Centennial Park, Elstree**

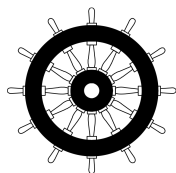
City: **WD6 3TJ Borehamwood**

Country: **UNITED KINGDOM**

Validity of this certificate is 5 years; **Expiry date: 03 June 2018**

This certificate has THREE Annexes.

Zevenaar, 21 March 2017



Willem Jan 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 2014/90/EU 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:

The HT649 may only be utilized for distress situation communication because only primary batterypacks are available.

Primary battery packs are CLB750G, CLB750M or CLB750L.

They bear a serial number suffix depending on the utilized celltype and capacity; earlier marketed packs bear no suffix; these packs are identical to packs with suffix C4.

suffix C4 = 2000 mAh (Li-MnO₂).

suffix C5 = 2200 mAh (Li-MnO₂).

suffix C6 = 3000 mAh (Li-FeS₃).

Documentation lodged for this EC type-examination

Test Reports:

- Telefication B.V.: 20071457300-rev 5.0, 19 October 2009
- R.N. Electronics Ltd.: 05-383/3674/1/08, 06 June 2008
- R.N. Electronics Ltd.: 04-415A/4172/1/10, 19 May 2010
- R.N. Electronics Ltd.: 04-417A/4172/1/10, 19 May 2010
- R.N. Electronics Ltd.: 05-8813-1-16 Issue 01, 27 May 2016
- R.N. Electronics Ltd.: 05-8813-2-16 Issue 01, 20 May 2016
- R.N. Electronics Ltd.: 01-8968-1-17 Issue 01, 08 February 2017
- R.N. Electronics Ltd.: 01-8968-3-17 Issue 01, 17 January 2017

Product Documentation:

- Assembly drawings
- Bill of materials
- Block diagram
- Electrical diagrams
- Internal photos
- External photos
- Manual

International Instruments and test standards

The equipment complies with:

EN 300 225	December, 2015	V1.5.1
EN 301 843-2	June, 2004	V1.2.1
EN 60945	October, 2002	Edition 4
IEC 60945/Corrigendum 1	April, 2008	Edition 4
IMO Resolution A.694(17)	1991	
IMO Resolution A.809(19)	1995	
ITU-R M.489-2	October, 1995	
MSC Resolution 149(77)	June, 2003	

Technical features and characteristics

The product includes the following features and characteristics:

VHF equipment

- Operating frequency range: TX: 155.0 - 161.45 MHz; RX: 155.0 - 163.425 MHz
- Modulation method(s): 16K0G3E
- Maximum output power: 1W rated
- Primary battery: 2.0 Ah, 2.2 Ah, 3.0 Ah; type designations CLB750G, CLB750M, CLB750L; Temperature range: -20°C to +55°C; Channel separation: 25 kHz

Trademarks and Type designations:

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

- | | |
|------------------------|---|
| - Product description: | Portable Survival craft VHF radio telephone |
| - Trademark: | Entel |
| - Type designation: | HT649 |
| - Hardware version: | V6.0 |
| - Software version: | V3.2.0.0 |