



## TYPE APPROVAL CERTIFICATE

For a 406 Megahertz Distress Beacon for use with the Cospas-Sarsat Satellite System

### Certificate Number: 384

**Manufacturer:** Ocean Signal Limited, UK

**Beacon Models:** EPIRB1, EPIRB1 (for distribution in Australia and New Zealand), EPIRB1 Pro

**Beacon Types:** EPIRB Non-Float Free (models "EPIRB1" and "EPIRB1 (for distribution in Australia and New Zealand)") or Float Free/Non-Float Free (EPIRB1 Pro)

**Test Laboratory:** OMEGA Test Centre

**Dates of Test:** February – June 2014

Details of the beacon features and battery type are provided overleaf.

The Cospas-Sarsat Council hereby certifies that the 406 MHz Distress Beacon Model identified above is compatible with the Cospas-Sarsat System as defined in documents:

C/S T.001 Specification for Cospas-Sarsat 406 MHz Distress Beacon, Issue 3 - Rev. 14, October 2013

C/S T.007 Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard, Issue 4 - Rev.8, October 2013

Original TAC 256 issued on **3 November 2014**

First extension TAC 297 issued on **20 December 2017**

Second extension TAC 322 issued on **23 September 2019**

Third extension TAC 332 issued on **13 October 2020**

Fourth extension TAC 346 issued on **7 July 2021**

Fifth extension TAC 356 issued on **22 April 2022**

Sixth extension TAC 384 issued on **18 April 2023**

Steven W. Lett  
Head of Cospas-Sarsat Secretariat

#### NOTE, HOWEVER:

1. This certificate does not authorize the operation or sale of any 406 MHz distress beacon. Such authorization may require type acceptance by national administrations in countries where the beacon will be distributed and may also be subject to national licensing requirements.
2. This certificate is intended only as a formal notification to the above identified manufacturer that the Cospas-Sarsat Council has determined, on the basis of test data of a beacon submitted by the manufacturer, that 406 MHz distress beacons of the type identified herein meet the standards for use with the Cospas-Sarsat System.
3. Although the manufacturer has formally stated that all beacons identified with the above model name(s) will meet the Cospas-Sarsat specification referenced above, this certificate is not a warranty and Cospas-Sarsat hereby expressly disclaims any and all liability arising out of or in connection with the issuance, use or misuse of the certificate.
4. This certificate is subject to revocation by the Cospas-Sarsat Council should the beacon type for which it is issued cease to meet the Cospas-Sarsat specification. A new certificate may be issued after satisfactory corrective action has been taken and correct performance demonstrated in accordance with the Cospas-Sarsat Type Approval Standard.
5. Cospas-Sarsat type approval testing requirements only address the electrical performance of the beacon at 406 MHz. Conformance of the beacon to operational and environmental requirements is the responsibility of national administrations.
6. This certificate authorizes the use of the registered name mark "Cospas-Sarsat" and of registered trademarks for the Programme's logos, for labelling, instruction materials, and marketing of the 406-MHz beacon model identified, but not for other marketing or sales purposes (i.e., not for general uses beyond this specific beacon model).

**Beacon Models:** EPIRB1, EPIRB1 (for distribution in Australia and New Zealand), EPIRB1 Pro

**Operating temperature range:** -20°C to +55°C (Class 2)

**Battery Details:** Panasonic, Lithium Manganese Dioxide, 2 x 3 CR123 cells

**Operating Lifetime:** 48 hours

**Transmit Frequency:** 406.040 MHz

**Beacon Model Features:**

- Internal GPS receiver model: Quectel L70;
- Update of the encoded position data at variable intervals between 30 minutes and 2 hours;
- Integral manually retractable antenna <sup>(1)(2)</sup>, or integral non-retractable antenna <sup>(3)</sup>;
- Beacon activation: manual and automatic (via water-switch) <sup>(1)(3)</sup>, or manual only <sup>(2)</sup>;
- Self-test mode, one burst of 520 ms;
- Homer transmitter (121.5 MHz, power: 14-18 dBm, duty cycle: 97%);
- GNSS self-test (no RF-transmission, number of GNSS self-tests is limited to 12 for the battery replacement period);
- Strobe-light (0.75 cd, 20-30 flashes per minute);
- Approved for operation while floating in water, placed on deck of ship, or in a safety raft.

**Approved Beacon Message Protocols:** Beacon is approved for encoding with the message protocols indicated with "Yes" and black text below:

<b>USER PROTOCOLS</b>	<b>USER-LOCATION PROTOCOLS</b>	<b>LOCATION PROTOCOLS</b>
No Maritime with MMSI	No Maritime with MMSI	Yes <b>Standard Location: EPIRB with MMSI</b>
No Maritime with Radio Call Sign	Yes <b>Maritime with Radio Call Sign</b>	Yes <b>Standard Location: EPIRB with Serial Number</b>
No EPIRB Float Free with Serial Number	No EPIRB Float Free with Serial Number	No Standard Location: ELT with 24-bit Address
No EPIRB No Float Free with Serial Number	No EPIRB Non-Float Free with Serial Number	No Standard Location: ELT with Aircraft Operator Designator
No Radio Call Sign	Yes <b>Radio Call Sign</b>	No Standard Location: ELT with Serial Number
No Aviation	No Aviation	No Standard Location: PLB with Serial Number
No ELT with Serial Number	No ELT with Serial Number	Yes <b>National Location: EPIRB</b>
No ELT with Aircraft Operator and Serial Number	No ELT with Aircraft Operator and Serial Number	No National Location: ELT
No ELT with Aircraft 24-bit Address	No ELT with Aircraft 24-bit Address	No National Location: PLB
No PLB with Serial Number	No PLB with Serial Number	No RLS Location: EPIRB/ELT/PLB
No National (Short Format Message)		No ELT(DT) Location: ELT with Serial Number
No National (Long Format Message)		No ELT(DT) Location: ELT with Aircraft Operator and Serial Number
		No ELT(DT) Location: ELT with Aircraft 24-bit Address

**NOTES:**

<sup>(1)</sup> applicable to the model “EPIRB1”

<sup>(2)</sup> applicable to the model “EPIRB1 (for distribution in Australia and NZ)”

<sup>(3)</sup> applicable to the model “EPIRB1 Pro”