

## TYPE APPROVAL CERTIFICATE

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

**Certificate Number: 301** 

Manufacturer: ACR Electronics Inc., Fort Lauderdale, USA

Beacon Type: PLB

Beacon Model(s): PLB-375 / PLB-375 (ResQLink+)

Additional Model Name: ResQLink / ResQLink+, 3Si Guardian Buoyant 406 MHz Personal Locator Beacon

Test Laboratory: TÜV SÜD Product Service Ltd, UK

**Date of Test:** January – June 2011

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-Sarsar System as defined in documents:

C/S T.001 Specification for Cospas-Sarsat 406 MHz Distress Beacon, Issue 3 - Rev. 11, October 2010
C/S T.007 Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard, Issue 4 - Rev.5, October 2010

Original TAC 219 issued on 11 July 2011
Second extension TAC 233 issued on 9 August 2012
Fourth extension TAC 245 issued on 4 November 2013
Sixth extension TAC 257 issued on 18 December 2014
Eighth extension TAC 271 issued on 17 November 2015
Tenth extension TAC 279 issued on 14 October 2016
Twelfth extension TAC 294 issued on 23 October 2017

First extension TAC 224 issued on 20 January 2012
Third extension TAC 241 issued on 3 May2013
Fifth extension TAC 254 issued on 29 July 2014
Seventh extension TAC 265 issued on 29 May 2015
Ninth extension TAC 276 issued on 4 May 2016
Eleventh extension TAC 287 issued on 12 April 2017
Thirteenth extension TAC 301 issued on 21 March 2018

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).

Certificate Number: 301 Dated: 21 March 2018

**Beacon Models:** PLB-375 / PLB-375 (ResQLink+) (1)

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

Battery Details: Panasonic CR123A, Lithium Manganese Dioxide (3 cells, <sup>2</sup>/<sub>3</sub> A-size)

**Operating Lifetime:** 24 hours

**Transmit Frequency:** 406.037 MHz

## **Beacon Model Features:**

- 121.5 MHz auxiliary radio locating device (80 mW, duty cycle 97%);

- Strobe light, 20 flashes/minute;
- Internal GPS receiver model: GlobalTop Tech Inc., model Gms-hpr, ACR P/N A1-11-0877-1;
- Self-test mode, one burst of 440 ms;
- Integrated antenna;
- GNSS self-test, one burst of 520 ms;
- Beacons were tested in PLB configuration ("on dry ground" and "above ground") only.

## **Approved Beacon Message Protocols:**

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

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

NOTE: (1) The model "PLB-375(ResQLink+)" is identical to the base model "PLB-375", but it has a higher volume case, slightly increased weight, changed centre of gravity and added buoyancy. The model "PLB-375 (ResQLink+)" has been approved for use while on ground or above ground, it has not been evaluated nor type approved for use while floating in water.