

## TYPE APPROVAL CERTIFICATE

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

**Certificate Number: 378** 

**Manufacturer:** ACR Electronics Inc., USA

**Beacon Models:** EPIRB2, EPIRB2 Pro

**Beacon Type:** EPIRB Non-Float Free (EPIRB2), Float Free/Non-Float Free (EPIRB2 Pro)

Test Laboratory: TÜV SÜD

**Dates of Test:** March 2022 – May 2022

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 4 - Rev. 8, June 2021

C/S T.007 Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard, Issue 5 - Rev. 7, June 2021

Original TAC 378 issued on 23 March 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).

Certificate Number: 378 Dated: 23 March 2023

**Beacon Models:** EPIRB2, EPIRB2 Pro

Alternate Model Names: rescueME EPIRB2, rescueME EPIRB2 Pro

Operating temperature range:  $-20^{\circ}\text{C to } +55^{\circ}\text{C (Class 2)}$ 

**Battery Details:** Energizer, Lithium Iron Disulphide (Li/FeS<sub>2</sub>), L91 3 x 2 cells (six in series)

**Operating Lifetime:** 48 hours

**Transmit Frequency:** 406.031 MHz

## **Beacon Model Features:**

- Internal GPS receiver model: Ublox MAX-M8Q (GPS, Galileo);

- Capable to update the encoded position data at variable intervals between 4 minutes and 15 minutes;
- Integral manually retractable antenna<sup>(1)</sup>, or non-retractable antenna<sup>(2)</sup>;
- Manual and automatic (via water-switch) activation;
- Homing: 121.5 MHz;
- Self-test mode, one burst of 520 ms;
- GNSS self-test (number of GNSS self-tests is limited to 60 for the battery replacement period);
- Strobe-light (24 flashes per minute);
- Near field communications (NFC) can be used to access beacon data and test results;
- Approved for operation while floating in water, or placed on deck of ship, or in safety raft.

**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	LO	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	EPIRB Float Free with Serial Number	No	EPIRB Float Free with Serial Number	No	Standard Location: ELT with 24-bit Address
No	EPIRB Non 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	No	Radio Call Sign	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	No	National Location: EPIRB
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	$No^{(3)}$	RLS Location: EPIRB
No	National (Short Format Message)			No	RLS Location: ELT
No	National (Long Format Message)			No	RLS Location: PLB
				$No^{(3)}$	RLS Location: MMSI
				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

NOTES: (1) applicable to the model "EPIRB2"

<sup>(2)</sup> applicable to the model "EPIRB2 Pro"

<sup>(3)</sup> See TAC 1378