

MR510/2 Personal Locator Beacon

Overview

Becker Avionics offers since 1970 the best in SAR technology and has delivered more than 30 000 beacons.

The new generation of Becker's MR510/2 is a Return Link Service Location Protocol (RLSLP) enabled and military-grade performance PLB with advanced features including a multi-constellation GNSS receiver (GPS/GLONASS/GALILEO).

The MR510/2 has a capability to receive a Return Link Message (RLM) provided by Galileo SAR Service.



Thanks to Galileo SAR service, the MR510/2 can receive and indicate COSPAS-SARSAT acknowledgement that your beacon has been accurately localised.

The MR510/2 is the most advanced COSPAS-SARSAT certified handheld PLB available today.

It is a rugged, multipurpose survival radio designed for civil and military aircrews, mariners and ground personnel.

Features

- Fully self-contained (transceiver, V/UHF/C-S antennas, with latest generation 72 channel GNSS receiver)
- Compact, lightweight, state-of-the-art technology
- Manual or automatic activation by lanyard or water immersion
- Life vest and ejection seat capability
- Designed for all airborne, land and marine applications
- Multi-band radio covering all emergency frequencies (121.5 MHz, 243.0 MHz and 406 MHz)
- Two-way VHF or UHF voice communication (programmable)
- Integrated Built-In-Test features
- COSPAS-SARSAT certification
- Compliance with: Stanag 7007 P 1 PSAR, MIL-STD 810E, ED-14E (DO-160E)

Accessories

- Test and programmer equipment
- Pressure container
- Different activation sets on request
- Other accessories on request





Technical Data

MR510/2	Specification
Operating frequencies	F1 (VHF): 121.500 MHz \pm 1.5 MHz F2 (UHF): 243.000 MHz \pm 3 MHz F3 (UHF): 406.037 MHz others on request
Modulation	Beacon and voice mode: AM (121.5 MHz; 243.0 MHz) COSPAS-SARSAT: C/S Specification T.001
Antenna	Tri-frequency built-in antenna and connector for external antenna
Operating temperature	-40...+55 °C, Class 1 -20...+55 °C, Class 2
Battery	Lithium type (LiSO ₂), Life time > 5 years
BITE	Self test with acoustic and optical indication for: GO / NO GO
Transmitter	
Output power	VHF 100 mW UHF 100 mW C/S 5 W
Voice mode F1/F2	VHF/UHF 50 mW
Modulation	Beacon mode: A2X not less than 60%, audio frequency swept at 2 to 3 sweeps per second Voice mode: A3E AM 80% COSPAS-SARSAT: Messages C/S T.001 RLS Type-1 Acknowledgment
VHF/UHF-Receiver F1/F2	
Sensitivity	-87 dBm, for 6 dB (S+N)/N, m=30%, 1 kHz
Audio output	\geq 100 mW, 90% modulation at 1000 Hz
GNSS receiver	72 channel, GPS L1C/A, GLONASS L10F, Galileo E1-B/C, SBAS L1C/A
Design standards	STANAG 7007 C/S T.001, C/S T.007, C/S T.012 MIL-STD-810F ED 14E/ DO-160E, ED 12B/ DO-178B RoHS-Directive, WEEE-Directive
Dimensions HxWxD	162.15 x 90 x 46,6 mm (antenna folded, storage position)
Weight	\leq 650 g with battery



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NOTICE: The use of RLS beacons is not authorised in all countries. Please contact us for more information. You may also visit the web page Countries Allowing RLS Beacons (<https://cospas-sarsat.int/en/beacon-ownership/rls-enabled-beacon-purchase>) to learn the most recent information about regional/global support for RLS.