

MR510/3 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 MR510/3 PLBs offers military-grade performance, with advanced features including multi-constellation GNSS receiver technology, which make it easier and quicker for COSPAS-SARSAT satellites to pick up distress signals and relay an accurate location to rescuers.

Pinpointing the location of the person in distress will quickly help search and rescue organizations to better locate individuals and save lives.



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

Transmissions from the MR510/3 are omnidirectional and continuous for at least 24 hours at extreme temperatures (-20°C) to help facilitate detection by satellites, aircraft or vessels, or by any other land, sea or airborne installation monitoring these frequencies.

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
- 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 810H, ED-14G (DO-160G), EUROCAE ED-62A, RTCA DO-227A

Accessories

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



Technical Data

MR510/3	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	-20...+55 °C, Class 2
Battery	Lithium type (Li-MnO ₂), Life time 2 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
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	C/S T.001, C/S T.007, C/S T.012, STANAG 7007, STANAG 4370, MIL-STD-810H, RTCA ED-62A, RTCA DO-227A, ED 14G/ DO-160G, ED 12C/ DO-178C, RoHS-Directive, WEEE-Directive
Dimensions HxWxD	148 x 90 x 47 mm (antenna folded, storage position)
Weight	\leq 720 g with battery



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