



Personal Locator Beacon

MR509/2

Search and Rescue (SAR)

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

The new generation of Becker's PLBs MR509/2 offers military-grade performance, with advanced features including GPS 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 agencies to better locate individuals and save lives.

MR509/2 is the most advanced COSPAS-SARSAT certified handheld PLB available today. It is a rugged, multipurpose survival radio and locator device designed for civil and military aircrews, mariners, and ground personnel.

Transmissions from the MR509/2 are omnidirectional and continue for at least 24 hours at extreme temperatures (-40 °C) to help facilitate detection by satellite, aircraft or vessels, or by any other land, sea or airborne installations monitoring these frequencies.

Features

- **COSPAS-SARSAT certification**
- **Designed for all airborne, land and marine applications**
- **Multi emergency band – 121.5 MHz, 243.0 MHz and 406 MHz**
- **Two-way VHF or UHF voice communication (programmable)**
- **Fully self-contained (transceiver, V/UHF/C-S antennas, with latest generation 12 channel GPS)**
- **Compact lightweight, with State-of-the-Art technology**
- **Manual or automatic activation by lanyard or water immersion**
- **Life vest and ejection seat capability**
- **Initiated Built-In-Test feature**
- **Compliance with: Stanag 7007 P 1 PSAR, MIL-STD 810E, ED-14E (DO-160E)**



Personal Locator Beacon (PLB): MR509/2

Applications

- **Civil and Military Aircrews**
- **Marine**
- **Search and Rescue Crews**
- **Outdoor Activities**
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Technical Data

Personal Locator Beacon		MR509/2
General		
Operating frequencies		
F1 (VHF)	121.500 MHz \pm 1.5 MHz	
F2 (UHF)	243.000 MHz \pm 3 MHz	
F3 (UHF)	406.025 MHz	
other frequencies on request	(F1/F2 only)	
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		
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		
BITE		
Self test with acoustic and optical indication for: GO / NO GO		
Weight		
≤ 615 g with battery		
Dimensions (HxWxD)		
162.15 x 90 x 46,6 mm (antenna folded, storage position)		
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	
COSPAS-SARSAT mode	messages C/S T.001	
Voice mode	A3E AM 80%	
UHF-Receiver F1/F2		
Sensitivity		
-87 dBm, for 6 dB (S+N)/N, m=30%, 1 kHz		
Audio output		
≥ 100 mW, 90% modulation at 1000 Hz		
GPS receiver		
12 channel, L1 band (C/A code)		
Accessories		
Test and programmer equipment Pressure container Different activation sets on request Other accessories on request		