

MR510

Personal Locator Beacon

FEATURES

COSPAS-SARSAT certification

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 programmable voice communications

Integrated Built-In-Test features

Compliance with: Stanag 7007 P 1 PSAR, MIL-STD 810E, ED-14E (DD-160E)



SPECIAL MISSION



PLB
Cospas Sarsat 406

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 PLBs 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.

The MR510 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, naval and ground personnel. Transmissions from the MR510 are omnidirectional and continuous for at least 24 hours at extreme temperatures (-40 °C) to help facilitate detection by satellites, aircraft or vessels, or by any other land, sea or airborne installation monitoring these frequencies.

BENEFITS

- ▶ Fully self-contained (transceiver, V/UHF/C-S antennas, with latest generation 12 channel GPS)
- ▶ Compact, lightweight, state-of-the-art technology
- ▶ Manual or automatic activation by lanyard or water immersion
- ▶ Life vest and ejection seat capability

MR510

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SPECIAL MISSION



TECHNICAL DATA

Personal Locator Beacon	MR510
General	
Operating frequencies	
F1 (VHF)	121.500 MHz ± 1.5 MHz
F2 (UHF)	243.000 MHz ± 3 MHz
F3 (UHF)	406.037 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