



MRC-320/E

Marine Radio Communication System

MRC-320/E marine radio communication system is a digital Software Defined Radio (SDR). It is secure and resisted against Electronic Warfare (EW) with capability of establishing plain/ciphered voice & data communication in fix frequency/frequency hopping mode. This radio can be operated in various warships, speedboats, boats, and coast stations for establishing communication between boat and boat and boat and coast.

Frequency range of the MRC-320/E is 136~174 MHz and as a result communication with military boats can be established as well as civil boats due to wide frequency band of the radio in comparison with the other marine radio communication systems.

MRC-320/E is equipped with the DSC capability as an obligation for marine standard communication. Benefitting this capability, the DSC messages including emergency messages, positional information, emergency message retransmission, and ... can be received via the guard independent receiver as well as answering them proportionally.

General specifications

Frequency range.....	VHF: 136 ~ 174 MHz
Frequency channel spacing.....	12.5KHz, 25KHz
Modulation type.....	FM, FSK, CPM, QPSK
Operating modes.....	fix frequency, frequency hopping
Operating voltage range.....	10-15 VDC (including the MIL-STD-1275 supply filter)
External GPS connection.....	✓
Frequency hopping rate.....	maximum 800 hop/s
Encryption type.....	internal
Data rate.....	12800bps, 19200bps
Connecting to remote control.....	via Ethernet, RS485, and ISDN
antenna type.....	CXA-210
Output power.....	maximum 40W
Harmonic rejection.....	better than 60dB
Adjacent channel rejection.....	batter than 55dB
Spurious signal rejection.....	better than 70dBc
Image frequency rejection.....	better than 70dBc
Receiving sensitivity.....	-116dBm with 12dB SINAD

Physical & environmental specifications

Dimension (H×W×D).....	230×110×130 mm
Weight.....	less than 4Kg
Operation temperature.....	-25°C ~ +65°C
Resistance against humidity.....	according to the MIL-STD-810
Water resistance.....	rain test (according to the MIL-STD-810)
Environmental Standard.....	MIL-STD-810