

DESCRIPTION

VRC-131/E vehicular radio communication system is a HF ($1.6 \sim 30 \text{ MHz}$) radio with maximum 150W power. This radio is designed and manufactured to be installed inside various types of military vehicles and can be operated from stationary installations by substituting some of its accessories.

In order to protect communication sight and operators in stationary operation, the radio can be controlled remotely by disconnecting it from the control unit using a pair field wire through up to 4km distance. From physical structure and technical specifications, this radio is similar to the MRC-130 and MRC-132 marine radio communication systems optimized for ground operation. VRC-131/E is compatible with the HF analogue radios as well as its VRC family.



General specifications

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Frequency band	1.6~29.9999 MHz	
Frequency channel spacing	100Hz	
Number of preset channels	100 channels	
Input supply	24-30 VDC	
Data/control interface	RS-232	
Modulation type	SSB-CW, AME-SSB	
ALE	\checkmark	
Frequency hopping	\checkmark	
Receiving specifications		
Receiving sensitivity	SSB: 1µV (15dB SINAD) SSB(CW): 1µV (20dB SINAD) AME: 6.7µV (15dB SINAD)	
Communication type	Half Duplex, Simplex	
Audio output	minimum 10mW on 300 Ω load	
IF/image rejection	70dB	
Transmitting specifications		
Output power	Low power: 10W, 20W, 30W Medium power: 40W, 60W, 80W High power: 100W, 120W, 150W	
Harmonic rejection	50dB	
Spurious signal rejection	50dB	
Frequency stability	±2PPm	
Physical & environmental specifications		
T/R Dimension (H×W×D)	400×300×150 mm	
CU Dimension (H×W×D)	200×250×60 mm	
MU Dimension (H×W×D)	350×250×80 mm	
Operating temperature	-25°C ~ +65°C	
Storage temperature	-40°C ~ +70°C	
Environmental standard	MIL-STD-810F	Iran 265 Defence