



IRD62S

Mobile Radio Repeater

IRD62S mobile radio repeater as center of a cell in the single-sight/multi-sight radio network under the DMR Tier II standard with capability of high reliability and analogue/digital facilities is proper to establish an advance full digital communication. This repeater can be operated in both analogue and digital modes whereas, it is compatible with available analogue networks. Based on type of the received signal, IRD62S switches between analog and digital modes automatically. Many requirements of the operators are met due to high output power of the repeater (50W). Installing this repeater inside the 19" racks easily, establishing secure communication due to software encryption process, powerful cooling fan, establishing radio network and communication with the other repeaters based on the IP network are other advantages of the IRD62S. On the whole, in civil radio networks, rack-mount digital repeater is considered to establish reliable and high quality communication for covering more operators and exchanging vital and online information.

General specifications

Frequency range.....	UHF: 350~400 MHz/400~470 MHz/450~520 MHz VHF: 136~174 MHz
Number of channels.....	16 channels
Channel spacing.....	12.5KHz/20KHz/25KHz
Operational voltage.....	13.6V $\pm$ 15%
Current consumption.....	receiving: <0.8A, transmitting: <11.0A
Frequency stability.....	$\pm$ 0.5ppm
Antenna impedance.....	50 Ω

Receiver specifications

Analogue sensitivity.....	0.3 μ V (12dB SINAD) 0.22 μ V typically (12dB SINAD) 0.4 μ V (20dB SINAD)
Digital sensitivity.....	0.3 μ V / BER5%

Transmitter specifications

RF output power.....	UHF: 5~45W (adjustable)/VHF: 5~50W (adjustable)
Analogue modulation type.....	FM
Digital modulation type.....	4FSK
Audio distortion.....	$\leq$ 3%
Audio response.....	+1 ~ -3dB
Voice compression.....	SELP
Digital protocol.....	ETSI-TS102 361-1,-2,-3

Physical and environmental specifications

Weight.....	8.5Kg
Dimension (H×W×D).....	88×483×366 mm
LCD dimension.....	2 inch, 4 rows
Operating temperature.....	-30°C ~ +60°C
Storage temperature.....	-40°C ~ +85°C
Standards.....	MIL-STD-810 C/D/E/F/G