



IRD63P

Portable Radio Repeater

The portable repeater IRD63P is a new generation of civil digital repeaters in DMR Tier standard which operation is very easy due to integrated design and embedded duplexer. This repeater could be used in manpack, wall-mounted and rack-mounted modes; also is compatible with various types of power supplies. GPS facility (optional), 10Ah Li-Ion backup battery (optional), voice and data transmission, IP-based communication are some of technical features of the repeater.

General specifications

Frequency range (UHF).....	350-400 / 400-470
Frequency range (VHF).....	136-174 MHz
Number of channels.....	16
Channel space.....	12.5/20/25 KHz
Operating voltage.....	DC: 13.6V $\pm$ 15%, Battery: 14.8V
Current consumption.....	RX: <3.5A, STBY: <0.8A
Battery.....	10Ah (Li-Lon)
Frequency stability.....	$\pm$ 0.5ppm
Antenna impedance.....	50ohm

RX specifications

Sensitivity (analog).....	0.3 μ V (12dB SINAD)
	0.22 μ V (12dB SINAD) (typical)
	0.4 μ V (20dB SINAD)
Digital sensitivity.....	0.3 μ V / BER5%

TX specifications

Output power.....	1-10 W (adjustable)
Type of analog modulation.....	FM modulation
Type of digital modulation.....	4FSK digital modulation
Audio distortion.....	$\leq$ 3%
Audio response.....	1~3dB
Voice compression.....	SELP
Digital protocol.....	ETSI-TS102 361-1,-2,-3

Environmental and mechanical specifications

Dimensions (without antenna).....	30x18x5cm (WxDxH)
Weight.....	3.5Kg
Operating temperature.....	-30 to +60 °C
Storage temperature.....	-40 to +85 °C