



RANGER
Communications, Inc.

R-78D

DMR-TDMA digital radio

DIGITAL TWO-WAY
PORTABLE RADIOS
More durable and reliable
in any environment.
Smart. Efficient. Accurate.

CRYSTAL CLEAR AUDIO

No hissing, crackling, fading and overlapping of voice tracks. Just a great radio at all times as long as you are within the coverage.

EXTENDED TALKTIME

Two-slot TDMA which enables up to 40 percent improvement in talk time in comparison with analogue radios. DMR digital radios features Sleep and Power-management technologies which enhances battery life and extends talktime even further.

DOUBLE THE CAPACITY

One of the principle benefits of DMR is that it enables a single 12.5 kHz channel to support two simultaneous and independent calls.

DURABLE & RELIABLE

A protective tough and rugged casing ensures its reliability and performance in its daily field operations.

ANALOG & DIGITAL

Ability to operate in both analog and digital modes.

BATTERY LATCH LOCK

Keeps the battery firmly and securely in place when the radio is accidentally dropped..

PROGRAMMABLE

Digital radios are programmable for Radio ID, Zone, Shortcut Button and Channel Frequency.

IP 57 RATED

Dustproof and Splashproof, so you can work with confidence in any challenging environment.



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PROGRAMMABLE FEATURES

- HIGH/LOW POWER
- SYSTEM SCAN
- MONITOR
- TIGHT/NORMAL SQUELCH
- REPEATER/TALKAROUND

Applicable MIL-STD & IP

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	I, II
High Temperature	501.1	I, II	501.2	I, II	501.3	I, II	501.4	I, II
Low Temperature	502.1	I	502.2	I, II	502.3	I, II	502.5	I, II
Temperature Shock	503.1	I	503.2	I	503.0	I	503.4	I, II
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain	506.1	II	506.2	II	506.3	II	506.4	III
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	-
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-
Dust	510.1	I	510.2	I	510.3	510.4	I, III	-
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.5	I

International Protection Standard	
Dust & Water Protection	IP57

Specifications

Model NO.	R-78D
Frequency Range	UHF:400-470MHz
Channel Capacity	32 Channels
Channel Spacing	12.5KHz
Battery Type	Li-ion
Operating Temperature	-20°C +50°C
Antenna Connector	SMA-K
Antenna Impedance	50Ω
Audio Output Power	≤1000mW@16Ω
Dimension(H*W*D)	128*61*38mm
Weight with battery	258g
IP Rating	IP57
Transmitter	
Output Power	High:≤5W HI Low: ≤2W Low
Frequency Stability	+2.5PPM
Adjacent Channel Power	≤ -60dB @ 12.5KHz
Free Time Slot Power	TDMA ≤ 57dBm
Conducted / Radiated Emission	Antenna : 9KHz-1GHz ≤-36dBm 1GHz-12.75GHz ≤-30dBm
Modulation BER(Bit Error Rate)	≤5%
Receiver	
Sensitivity	≤-117dBm (Ber≤5%)
Co-channel Rejection	≥-12dB
Adjacent Channel Selectivity	≥60dB
Spurious Rejection	70dB
Inter-Modulation Response	≥65dB(ETSI)
Conducted Spurious Emission	Antenna : 9KHz-1GHz ≤-57dBm 1GHz-12.75GHz ≤-47dBm

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ACCESSORIES

