

Portable Two-Way Radio Specifications

General Specifications	
Channel Capacity	16
Power Supply	Rechargeable battery 7.5v
Dimensions: H x W x D (mm)	Height excluding knobs
With standard high capacity NiMH battery	137 x 57.5 x 37.5
With ultra high capacity NiMH battery	137 x 57.5 x 40.0
With NiCD battery	137 x 57.5 x 40.0
With Lilon battery	137 x 57.5 x 33.0
Weight: (gm)	
With Standard high capacity NiMH battery	420
With Ultra high capacity NiMH battery	500
With NiCD battery	450
With Lilon battery	350
Average Battery Life @5/5/90 Cycle:	Low Power High Power
With Standard high capacity NiMH battery	11 hours 8 hours
With Ultra high capacity NiMH battery	14 hours 11 hours
With NiCD battery	12 hours 9 hours
With Lilon battery	11 hours 8 hours
Sealing:	Withstands rain testing per MIL STD 810 C/D/E and IP54
Shock and Vibration:	Protection provided via impact resistant housing exceeding MIL STD 810-C/D/E and TIA/EIA 603
Dust and Humidity:	Protection provided via environment resistant housing exceeding MIL STD 810 C/D/E and TIA/EIA 603

Portable Military Standards 810 C, D, & E						
Applicable MIL-STD	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2
Low Temperature	502.1	1	502.2	1,2	502.3	1,2
Temp. Shock	503.1	1	503.2	1	503.3	1
Solar Radiation	505.1	1	505.2	1	505.3	1
Rain	506.1	1,2	506.2	1,2	506.3	1,2
Humidity	507.1	2	507.2	2,3	507.3	2,3
Salt Fog	509.1	1	509.2	1	509.3	1
Dust	510.1	1	510.2	1	510.3	1
Vibration	514.2	8,10	514.3	1	514.4	1
Shock	516.2	1,2,5	516.3	1,4	516.4	1,4

Transmitter		
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF: 300-350 MHz UHF1: 403-470 MHz	LB1: 29.7-42 MHz LB2: 35 - 50 MHz
Channel Spacing	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability (-25°C to +55°C, +25° Ref.)	±2.5 ppm	±10 ppm
Power	136-174: 1-5W 300-350: 1-4W 403-470: 1-4W	1-6W
Modulation Limiting	±2.5 @ 12.5 kHz ±4.0 @ 20 kHz ±5.0 @ 25 kHz	±2.5 @ 12.5 kHz ±4.0 @ 20 kHz ±5.0 @ 25 kHz
FM Hum & Noise	-40 dB typical	-40 dB typical
Conducted/Radiated Emission	-36 dBm <1 GHz -30 dBm >1 GHz	-36 dBm <1000 MHz -30 dBm <1000 MHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz	-60 dB @ 12.5 kHz -70 dB @ 25 kHz
Audio Response (300-3000Hz)	+1 to -3 dB	+1 to -3 dB
Audio Distortion	3%	3%

Receiver		
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF: 300-350 MHz UHF1: 403-470 MHz	LB1: 29.7-42 MHz LB2: 35 - 50 MHz
Channel Spacing	12.5/20/25 kHz	12.5/20/25 kHz
Sensitivity (12 dB SINAD) EIA	.25 µV typical	.25 µV typical
Sensitivity (20 dB SINAD) ETS	.50 µV typical	.50 µV typical
Intermodulation EIA	70 dB	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz	60 dB @ 12.5 kHz 70 dB @ 25 kHz
Spurious Rejection	70 dB	70 dB
Rated Audio	0.5W	0.5W
Audio Distortion @ Rated Audio	3% typical	3% typical
Hum & Noise	-40 dB @ 12.5 kHz -50 dB @ 20/25 kHz	-45 dB @ 12.5 kHz -50 dB @ 20/25 kHz
Audio Response (300-3000 Hz)	+1 to -3 dB	+1 to -3 dB
Conducted Spurious Emission	-57 dBm <1 GHz -47 dBm >1 GHz ETS 300 086	-57 dBm <1 GHz -47 dBm >1 GHz FCC Part 15

Data for +25°C unless otherwise specified

*Availability subject to individual country's law and regulations.

Specifications are subject to change without notice and are issued for guidance purposes only.

All specifications listed are typical. Radios meet applicable regulatory requirements.

Conforms to EC directive 89/336/EEC

Complies with ETS 300 113

Contact your local Authorised Motorola Dealer to find out more about how communicating with the Professional Radio series will benefit your organisation.



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For exceptional performance, reliability and quality, Motorola Original accessories and batteries are the only options. For full details, please refer to the Professional Radio Series Accessories brochure.



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