

Specification Sheet

MT 1500™ Portable Analog Radio



POWER AND PERFORMANCE THAT MOVE WITH THE TIMES

Motorola's MT 1500 portable radio is a power-packed solution that is rich on features and high on quality. This durable, day-in, day-out performer offers two-way analog functionality in compact, lightweight design that moves with the times.

Available in the 800 frequency band, the MT 1500 radio offers Analog Type II Trunking or conventional Analog with MDC 1200 Stat Alert. Key software features expand its operation to three zones and multiple systems, including Conventional and wide area SmartZone.

Small but powerful. Simple yet solid. Feature-rich and economical. Motorola's MT 1500 portable radio is the analog that stands out in the field.

MT 1500 PORTABLE RADIO FEATURES:

- Available in 800 frequency band (806-870 MHz)
- 3-watt power
- Supports Motorola Analog Type II Trunking and Analog Conventional
- Offers key software features:
 - 48 channels
 - 3 zones
 - Wide Area SmartZone
 - Call Alert Decode
 - Priority Scan
 - Select Radio Inhibit
 - MDC Stat Alert
- Meets Military Standards 810 C, D and E
- Utilizes Customer Programming Software and supports USB and RS-232
- Compatible with XTS 3000, XTS 3500, XTS 2500, HT 1000, MT 1000 and MTS 2000 portable radio accessories
- Supports enhanced audio features: noise reduction software and audio gain control



GENERAL SPECIFICATIONS

Frequency Range	806-870 MHz
Power Supply	7.5 V
Dimensions (mm) (HxWxD)	
Less Battery	152.4 x 58.4 x 25.4
With NiCd Ultra-High Capacity	152.4 x 58.4 x 50.8
With NiMH Ultra-High Capacity	152.4 x 58.4 x 50.8
Weight (oz)	
Less Battery	10.50
With NiCd Ultra-High Capacity	18.60
With NiMH Ultra-High Capacity	20.10
Average Battery Life (hr)	
With NiCd Ultra-High Capacity	8
With NiMH Ultra-High Capacity	12

FACTORY MUTUAL APPROVALS

Factory Mutual has given the MT 1500™ Portable an intrinsically safe rating for use in Classes I, II, and III, Division 1, Groups C, D, E, F, and G, as well as non-incendive use in Class I, Division II, Groups A, B, C, and D on models ordered with the Factory Mutual option.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C / +60°C
Storage Temperature	-40°C / +85°C
Humidity	Per MIL-STD
ESD	IEC 801-2 KV
Water & Dust Intrusion	IP54, MIL-STD

TRANSMITTER

Guaranteed Performance Specifications

Frequency Range	800 MHz: 806-824, 851-870 MHz
RF Power Output	700 MHz: 3 W max 800 MHz: 3 W min
Frequency Stability (-30°C to +60°C)	-1.5 PPM
Modulation Limiting	
12.5 kHz chnl	±2.5 kHz
25 kHz chnl	±5.0 kHz
Modulation	C4FM / FM
Channel Spacing	12.5 / 25 kHz
FM Hum & Noise Radio	
25 kHz	-40 dB
12.5 kHz	-31 dB
Conducted / Radiated Emissions	-13 dBm
Audio Response (0.3-3 kHz)	+1 to -3 dB
Audio Distortion	3.0%

RECEIVER

Guaranteed Performance Specifications

Frequency Range	700 MHz: 764-767, 773-776 MHz 800 MHz: 851-870 MHz
Hum and Noise	-40 dB
Sensitivity EIA	.35 µV
Sensitivity ETS	.50 µV
Sensitivity (5% BER)	.35 µV
Channel Spacing	12.5 / 25 kHz
Adjacent Channel Selectivity	Analog: 70 dB (25 K) 65dB (12.5 K) Digital: 60 dB (12.5 K)
Intermodulation per EIA	70 dB
Spurious Rejection	70 dB
Rated Audio	0.5 W
Audio Distortion @ Rated Audio	3%
Audio Response (0.3-3 kHz)	+1 to -3dB
Conducted Spurious Emission	-57dBm < 1 GHz -47 dBm > 1 GHz

PORTABLE MILITARY STANDARDS 810 C, D, E & F

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II
High temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.1	-	503.2	I/A1C3	503.3	I/A1C3	503.4	I
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-
Salt Fog	509.1	-	509.2	-	509.3	-	509.4	-
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I/IV	516.5	I, IV



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