

Specification Sheet

XTS 1500™ Digital Portable Radio



AFFORDABILITY IN ACTION. DURABILITY TO DEPEND ON. SIMPLICITY THAT SUCCEEDS.

Motorola's XTS 1500 portable radio is the cost-effective, convenient, compact solution for public works and public utilities. This high-quality APCO Project 25 radio features two-way functionality in a durable, dependable unit that is very easy to use.

Available in the 700/800 frequency band, the XTS 1500 portable supports both APCO Project 16 and Project 25 operation. Use the analog functionality on the XTS 1500 or migrate to limited wide-area Project 25 operation. Look for VHF and UHF band additions in the coming year.

For true simplicity, affordability and reliability make the right call with the XTS 1500 digital radio from Motorola.

XTS 1500 PORTABLE RADIO FEATURES:

- Available in 700/800 frequency band (764-870 MHz)
- 3-watt power
- Supports APCO Project 16 (3600 control channel) and APCO Project 25 (9600 control channel)
- Works with ASTRO® Analog and Digital Trunking with Mutual Aid or ASTRO 25 Digital Trunking with Mutual Aid
- 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	764-870 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

TRANSMITTER

Guaranteed Performance Specifications

Frequency Range	700 MHz: 764-767, 773-776, 794-797, 803-806 MHz 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%

FACTORY MUTUAL APPROVALS

Factory Mutual has given the XTS 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

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 Emmission	-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



Motorola's Commercial, Government and Industrial Solutions Sector is a recipient of the prestigious 2002 Malcolm Baldrige National Quality Award. This honor demonstrates our commitment to performance excellence and quality achievement.



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Specifications subject to change without notice.

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