MOTOTRBO™

XiR M8260/M8268/M8220/M8228 Mobile Radios

Mobile radios available in Display and Numeric Display, **GPS and Non-GPS models**

Uses Time-Division Multiple-Access (TDMA) digital technology which **doubles the number of users** you can have on a single licensed 12.5 kHz channel

Integrates voice and data to increase operational efficiency

Supports **integrated applications** including MOTOTRBO Text Messaging Services and MOTOTRBO Location Services

Provides **clearer voice communications** throughout the coverage area as compared to analog radios

Enables additional functionality including dispatch data, and enhanced call signaling

Enhanced call management features include call alert, emergency, remote monitor, push-to-talk ID, radio check, private call, all call and radio disable

Four programmable buttons (two buttons for XiR M8220) for **easy access to favorite features;** Replacement Button Kit offers customized feature-specific buttons

Emergency button (or footswitch) **alerts supervisor** or dispatcher in emergency situations

Multi-colored LED indicators for **clear, visible feedback** of calling, scanning and monitoring features

XiR M8268 can **transmit location coordinates** with an emergency call using Location Services application

Allows **easy migration** from analog to digital as all units operate in analog and digital modes

Meets U.S. Military Standards 810 C, D, E, and F, and **Motorola standards** for durability and reliability

Newly designed and durable IMPRES™ keypad microphone supports unit to unit **short free form and quick text messaging**

Utilizes the IMPRES Audio System for **enhanced audio functionality**

Send short free-form (requires keypad microphone) and quick **text messaging** via programmable buttons

XiR M8260/8268 contacts list accommodates up to **256 contacts**

Accelerate performance.

The next-generation professional two-way radio communications solution is here, with more performance, productivity and value—thanks to digital technology that delivers increased capacity and spectrum efficiency, integrated data communications and enhanced voice communications.

MOTOTRBO offers you a private, standards-based, cost-effective solution that can be tailored to meet your unique coverage and feature needs. This versatile portfolio provides a complete system of portable radios, mobile radios, repeaters, accessories and data applications.

General Specifications*

	XiR M8260 Display Non GPS Model XiR M8268 Display GPS Model		XiR M8220 Non-Display Non-GPS Model XiR M8228 Non-Display GPS Model	
	UHF	**VHF**	**UHF**	**VHF**
Channel Capacity	160		32	
Typical RF Output				
Low Power	1-25 W	1-25 W	1-25 W	1-25 W
High Power	25-40 W	25-45 W	25-40 W	25-45 W
Frequencies	403 - 470 MHz	136-174 MHz	403 - 470 MHz	136-174 MHz
Dimension (HxWxT)	51 x 175 x 206 mm		51 x 175 x 206 mm	
Weight	1.8 kg (4.0 lbs)		1.8 kg (4.0 lbs)	
Current Drain (High Power)				
Standby	0.81 A max		0.81 A max	
Rx @ Rated Audio	2 A max		2 A max	
Tx @ Rated Audio	14.5 A max		14.5 A max	
FCC Description	1-25 W: ABZ99FT4081 25-40 W: ABZ99FT4080	25-45 W: ABZ99FT3082	1-25 W: ABZ99FT4081 25-40 W: ABZ99FT4080	25-45 W: ABZ99FT3082

Receiver				
Frequencies	403-470 MHz	136-174 MHz	403-470 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz		12.5 kHz/ 25 kHz	
Frequency Stability	+/- 1.5 ppm (XiR M8260)		+/- 1.5 ppm (XiR M8220)	
(-30° C, +60° C, +25° C)	+/- 0.5 ppm (XiR M8268)		+/- 0.5 ppm (XiR M8228)	
Analog Sensitivity	0.3 uV (12 dB SINAD) 0.4 uV (20 dB SINAD) 0.22 uV (typical)		0.3 uV (12 dB SINAD) 0.4 uV (20 dB SINAD) 0.22 uV (typical)	
Digital Sensitivity	5% BER: 0.3 uV		5% BER: 0.3 uV	
Intermodulation				
TIA603C	75 dB	78 dB	75 dB	78 dB
ETS	60 dB	60 dB	60 dB	60 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz		60 dB @ 12.5 kHz	
(TIA603, ETS)	70 dB @ 25 kHz		70 dB @ 25 kHz	
Spurious Rejection				
TIA603C	75 dB	80 dB	75 dB	80 dB
ETS	70 dB	70 dB	70 dB	70 dB
Rated Audio	3 W (Internal) 7.5 W (External - 8 ohms) 13 W (External - 4 ohms)		3 W (Internal) 7.5 W (External - 8 ohms) 13 W (External - 4 ohms)	
Audio Distortion @ Rated Audio	3% (typical)		3% (typical)	
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz		-40 dB @ 12.5 kHz -45 dB @ 25 kHz	
Audio Response	+ 1, -3 dB		+ 1, -3 dB	
Conducted Spurious Emission	-57 dBm		-57 dBm	

Transmitter				
Frequencies	403-470 MHz	136-174 MHz	403-470 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz		12.5 kHz/ 25 kHz	
Frequency Stability	+/- 1.5 ppm (XiR M8260)		+/- 1.5 ppm (XiR M8220)	
(-30° C, +60° C, +25° C)	+/- 0.5 ppm (XiR M8268)		+/- 0.5 ppm (XiR M8228)	
Power Output				
Low Power	1-25 W	1-25 W	1-25 W	1-25 W
High Power	25-40 W	25-45 W	25-40 W	25-45 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz		+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz	
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz		-40 dB @ 12.5 kHz -45 dB @ 25 kHz	
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz		-36 dBm < 1 GHz -30 dBm > 1 GHz	
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 25 kHz		-60 dB @ 12.5 kHz -70 dB @ 25 kHz	
Audio Response	+1, -3 dB		+1, -3 dB	
Audio Distortion	3%		3%	
FM Modulation	12.5 kHz : 11K0F3E 25 kHz: 16K0F3E		12.5 kHz : 11K0F3E 25 kHz: 16K0F3E	
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE		12.5 kHz Data Only: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE	
Digital Vocoder Type	AMBE+2™		AMBE+2™	
Digital Protocol	ETSI-TS102 361-1		ETSI-TS102 361-1	

GPS	
Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)	
TTFF (Time To First Fix) Cold Start	< 1 minute
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 10 meters

Environmental Specifications	
Operating Temperature	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
ESD	IEC-801-2KV
Water Intrusion	IEC 60529 - IP57
Packaging Test	MIL-STD 810D and E

*Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.
Conforms to
EC 1999/5/EC (R&TTE - Radio and Telecommunications Terminal Equipment)
EN 300 086
EN 300 113

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