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

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

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

Optional **IP Site Connect** provide automatic roaming from one coverage area to another with no manual intervention or interruption

The optional **enhanced privacy** mode further protects the voice and data communications

Optional **Capacity Plus** enables repeaters to manage the availability of active channels. Users are automatically connected to co-workers without switching channels

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

Lone Worker feature alerts supervisor or dispatch by sending out an alarm when there is no radio activity over a specified duration of time.

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	1000			32		
Frequencies	403-470 MHz	450-512 MHz	136-174 MHz	403-470 MHz	450-512 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		
Power Supply	13.8 VDC			13.8 VDC		
FCC Description	1-25W : ABZ99FT4081 25-40W : ABZ99FT4080	1-40W: ABZ99FT4083	1-25W : ABZ99FT3083 25-45W : ABZ99FT3082	1-25W : ABZ99FT4081 25-40 W : ABZ99FT4080	1-40W: ABZ99FT4083	1-25 W : ABZ99FT3083 5-45 W : ABZ99FT3082
Receiver						
Frequencies	403-470 MHz	450-512 MHz	136-174 MHz	403-470 MHz	450-512 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz			12.5 kHz/ 25 kHz		
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (XiR M8260) +/- 0.5 ppm (XiR M8268)			+/- 1.5 ppm (XiR M8220) +/- 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 ETS	 75 dB 60 dB		 78 dB 60 dB	 75 dB 60 dB		 78 dB 60 dB
Adjacent Channel Selectivity (TIA603, ETS)	60 dB @ 12.5 kHz 70 dB @ 25 kHz			60 dB @ 12.5 kHz 70 dB @ 25 kHz		
Spurious Rejection TIA603C ETS	 75 dB 70 dB		 80 dB 70 dB	 75 dB 70 dB		 80 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	450-512 MHz	136-174 MHz	403-470 MHz	450-512 MHz	136-174 MHz
Power Output Low Power High Power	 1-25 W 25-40 W	 1-40 W	 1-25 W 25-45 W	 1-25 W 25-40 W	 1-40 W	 1-25 W 25-45 W
Channel Spacing	12.5 kHz/ 25 kHz			12.5 kHz/ 25 kHz		
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (XiR M8260) +/- 0.5 ppm (XiR M8268)			+/- 1.5 ppm (XiR M8220) +/- 0.5 ppm (XiR M8228)		
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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