SPECIFICATION SHEET
MOTOTRBO™
XiR M8260/M8268/M8220/M8228
MOBILE RADIOS

IDEAL COMMUNICATION SOLUTION FOR YOUR BUSINESS

MOTOTRBO™
XiR M8260/M8268/M8220/M8228 MOBILE RADIOS

Motorola is a company of firsts with a rich heritage of innovation. We continue to invent what's next – connecting people, delivering mobility and making technology personal. Versatile and powerful, MOTOTRBO combines the best in two-way radio functionality with digital technology, making it the ideal communication solution for your business. You get enhanced features, increased capacity, integrated data applications, exceptional voice quality and extended battery performance. This means more productive employees and lower operating costs for your business.

- **Integrates Voice and Data** into one device to increase your operational efficiency and support integrated applications including MOTOTRBO Text Messaging Services. Also features an integrated GPS module for use with third-party location tracking applications.
- Uses Time-Division Multiple-Access (TDMA) digital technology to provide **Twice The Calling Capacity** (as compared to analog or FDMA radios) for the price of one frequency license. A second call doesn't require a second repeater, saving you equipment costs.
- In digital mode, provides **Clearer Voice Communications** throughout the coverage area, as compared to analog radios, rejecting static and noise.
- Features the **Transmit Interrupt Suite*** – voice interrupt, remote voice dekey, emergency voice interrupt – to help prioritize critical communication exactly when needed.
- The **IP Site Connect*** digital solution uses the Internet to extend coverage of your MOTOTRBO communication system to users anywhere in the world for dramatically improved customer service and increased productivity.
- **Capacity Plus*** is a scalable, singlesite digital trunking solution that can expand the capacity of your MOTOTRBO communication to over a thousand radio users without adding new frequencies.
- **Motorola's Application Developer Program** enables the development of customized data applications that adapt MOTOTRBO radios to meet the unique needs of your business.

*Optional feature, please indicate it when placing the radio order.

MOTOTRBO™ MOBILE RADIO

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 : ABZ99FT408 25-40 W : ABZ99FT4080	11-40W: 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	75 dB		78 dB	75 dB		78 dB
ETS	60 dB		60 dB	60 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	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	450-512 MHz	136-174 MHz	403-470 MHz	450-512 MHz	136-174 MHz
Power Output						
Low Power	1-25 W	1-40 W	1-25 W	1-25 W	1-40 W	1-25 W
High Power	25-40 W		25-45 W	25-40 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	< 2 minutes
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
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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