



MOTOTRBO™

XiR R8200 Repeater

MOTOTRBO PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM THE FUTURE OF TWO-WAY RADIO

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.



- 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.
- Provides **Easy Migration** from analog to digital with the ability to operate in both analog and digital modes and utilizing the **Dynamic Mixed Mode*** repeater functionality allows for automatic switching between analog and digital mode on the same repeater.
- 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, single-site 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™
Repeater Radio

General Specifications*

	XiR R8200		
	UHF		VHF
Channel Capacity	16		
Frequencies	403-470 MHz	450-512 MHz	136-174 MHz
Dimension (H x W x L)	132.6 x 482.6 x 296.5 mm 5.22 x 19 x 11.67 in		
Voltage requirements	100 - 240 VAC, 50/60Hz		
Weight	14 kg (31 lbs)		
Current Drain			
Standby	1.0A (100 VAC), 0.5A (240 VAC)		
Transmit	4.0A (100 VAC), 1.8A (240 VAC)		
Operating Temperature Range	-30°C to +60°C		
Max Duty Cycle	100%		
FCC Description	1-25 W : ABZ99FT4026 25-40 W : ABZ99FT4025	1-40W : ABZ99FT4027	1-25 W : ABZ99FT3026 25-45 W : ABZ99FT3025

Receiver

Frequencies	403-470 MHz	450-512 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz		
Frequency Stability (-30° C, +60° C, +25° C)	+/- 0.5 ppm		
Analog Sensitivity	0.3 uV (12 dB SINAD) 0.4 uV (20 dB SINAD) 0.22 uV (typical)		
Digital Sensitivity	5% BER: 0.3 uV		
Intermodulation			
TIA603C	75 dB		
ETS	70 dB		
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 25 kHz		
Spurious Rejection			
TIA603C	75 dB		80 dB
ETS	70 dB		70 dB
Audio Distortion @ Rated Audio	3% (typical)		
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz		
Audio Response	+ 1, -3 dB		
Conducted Spurious Emission	-57 dBm		

Transmitter

Frequencies	403-470 MHz	450-512 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz		
Frequency Stability (-30° C, +60° C, +25° C)	+/- 0.5 ppm		
Power Output			
Low Power	1-25 W	1-40 W	1-25 W
High Power	25-40 W		25-45 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz		
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz		
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz		
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 25 kHz		
Audio Response	+1, -3 dB		
Audio Distortion	3%		
FM Modulation	12.5 kHz : 11K0F3E 25 kHz: 16K0F3E		
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE		
Digital Vocoder Type	AMBE+2™		
Digital Protocol	ETSI-TS102 361-1		

*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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