



# MOTOTRBO™

## XiR R8200 Repeater



Supports **two simultaneous voice or data paths** in digital Time-Division Multiple-Access (TDMA) mode

**Doubles the number of users** you can have on a single licensed 12.5 kHz channel

**Integrates voice and data** to increase operational efficiency

Operates in **analog or digital** mode – bright, clear, colored LEDs indicate mode  
Optional **IP Site**

**Connect** allows networks up to 15 repeaters to expand voice & data coverage

**Monitor and manage repeater** via the the optional diagnostic and control utility

**100% continuous full duty cycle** at high power

**Integrated** power supply

**Rack or wall-mountable;** desktop housing also available

**Automated** battery back-up (battery sold separately)

Optional **Capacity Plus** is a scalable, single-site digital solution that enables a large group of MOTOTRBO radio users to share both voice and data communication on the same system

### 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 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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