

# Motorola Mototrbo XPR™ 3000e Series

*Monitoring supply needs on a manufacturing line or reporting an emergency on school grounds, how do you keep employees connected and students safe? MOTOTRBO digital radio solutions can help by putting the power of digital communications within reach.*

Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. XPR 3000 Series radios offer best-in-class audio in a scalable solution to meet your communication needs. Because they are also analog interoperable, you can make the transition to digital at your own pace and budget.

The XPR 3000 Series radios can remaster your workplace and the way people collaborate to help you achieve even greater productivity, safety and cost-effectiveness.

## Exceptional Design

The XPR 3000 Series offers a compact and lightweight design, making it comfortable for users to carry during long work shifts. Controls are designed to optimize ease of use, including an innovative new connector design that allows accessories to be securely attached and detached in seconds, without the use of any tools.

## Enhanced Productivity And Efficiency

The XPR 3000 Series offers plenty of features to make workers more efficient. The two-line display and navigation menu on the XPR 3500 portable is intuitive and easy-to-use, so workers can stay focused on the job at hand. Enhanced features such as voice announcement provide audible confirmation of channel and zone changes without having to look at the radio, and convenient one-touch access buttons provide quick access to favorite radio features.



XPR 3500

XPR 3300

## Industry-Leading Audio

When it comes to exceptional audio clarity, the quality of digital can't be denied. With the XPR 3000 Series portables, you get digital audio clarity throughout your coverage area plus unique features to help your employees hear and speak clearly, wherever they work.

Increased background noise suppression filters out unwanted external clamor – from the rumble of forklifts to the buzz of school hallways. And with our exclusive Intelligent Audio feature, the radio volume automatically adjusts to compensate for background noise, so workers don't need to adjust their radio volume to avoid missing a call in loud situations or disturbing others when they move into quiet places. IMPREST™ audio accessories also enhances noise suppression and improves voice intelligibility for smarter audio than they've ever experienced.

## 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 61000-4-2 Level 3
Dust and Water Intrusion	IEC60529 - IP55
Packaging test	MIL-STD 810D and E

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## Receiver Specifications

	VHF	UHF
Frequencies	136-174 MHz	403-512 MHz
Channel Spacing	12.5 kHz / 25 kHz*	12.5 kHz / 25 kHz*
Frequency Stability	± 0.5 ppm	± 0.5 ppm
Analog Sensitivity (12dB SINAD) Typical	0.3uV 0.22uV (typical)	0.3uV 0.22uV (typical)
Digital Sensitivity	5% BER @ 0.25uV (0.19uV typical)	
Intermodulation (TIA603D)	70 dB	
Adjacent Channel Selectivity (TIA603A)-1T	60dB @ 12.5 kHz / 70dB @ 25 kHz*	
Adjacent Channel Selectivity (TIA603D)-2T	45dB @ 12.5 kHz / 70dB @ 25 kHz*	
Spurious Rejection (TIA603D)	70 dB	
Rated Audio	0.5W	
Audio Distortion @ Rated Audio	5% 3% (typical)	
Hum and Noise	'-40dB @ 12.5 kHz / -45dB @ 25 kHz*	
Audio Response	TIA603D	
Conducted Spurious Emission (TIA603D)	-57 dBm	

## Transmitter Specifications

	VHF	UHF
Frequencies	136-174 MHz	403-512 MHz
Channel Spacing	12.5 kHz / 25 kHz*	12.5 kHz / 25 kHz*
Frequency Stability	± 0.5 ppm	± 0.5 ppm
Low Power Output	1W	1W
High Power Output	5W	4W
Modulation Limiting	± 2.5 kHz @ 12.5 kHz ± 5.0 kHz @ 25 kHz*	
FM Hum and Noise	'-40 dB@ 12.5 kHz '-45 dB@ 20/25 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	TIA603D	
Audio Distortion	3%	
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D & 7K60FXD 12.5 kHz Voice: 7K60F1E & 7K60FXE Combination of 12.5 kHz Voice & Data: 7K60F1W	
Digital Vocoder Type	AMBE+2™	
Digital Protocol	'-ETSI TS 102 361 -1,-2,-3	

## Military Standards

	810C		810D		810E		810F		810G	
Applicable MIL-STD	Method	Procedure	Method	Procedure	Method	Procedure	Method	Procedure	Method	Procedure
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I, II	501.2	I/A1,II/A1	501.3	I/A1,II/A1	501.4	I/Hot, II/Hot	501.5	I-A1, II
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I-C3, II/C1	502.5	I, II
Temperature Shock	503.1	-	503.2	I/A1/C3	503.3	I/A1/C3	503.4	I	503.5	I-C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I-A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-	507.5	II
Salt Fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I-cat 24, II/5
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, VI