



**DIGITAL, NOW WITHIN REACH**

# MOTOTRBO™ XPR™ 3000 SERIES DIGITAL TWO-WAY PORTABLE RADIOS



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.



## PRODUCT SPEC SHEET

### MOTOTRBO™ XPR 3000 SERIES PORTABLE RADIOS



## 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.

## 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. IMPRES™ audio accessories also enhances noise suppression and improves voice intelligibility for smarter audio than they've ever experienced.

## HIGH-POWERED PERFORMANCE

Because the XPR 3000 Series uses TDMA digital technology, it delivers twice the calling capacity plus clearer voice communications. When it comes to battery performance, these radios operate up to 40 percent longer between recharges compared to analog. In addition, the leading-edge IMPRES™ technology in our batteries, chargers and audio accessories also ensures longer talk time and clearer audio.

## MIGRATE AT YOUR OWN PACE

Keeping operations running smoothly during a change in communication systems is vital to your operation. It's easy to migrate to digital because the XPR 3000 Series radios operate in analog and digital mode while the dynamic mixed mode repeater functionality streamlines automatic switching between analog and digital calls. So you can begin using MOTOTRBO radios and repeaters on your existing analog system, and when your time and budget allow, move to digital at your own pace.

## SCALABLE TO MEET YOUR NEEDS

Your workforce is hard at work every day – getting students home safely, unloading cargo, checking inventory and checking on guests. That's why you'll appreciate the easy flexibility and scalability of the XPR 3000 Series to fit your changing needs and coverage area. All it takes is a simple software upgrade to add key features like enhanced scrambling for increased voice privacy or the transmit interrupt suite to prioritize critical communication exactly when it's needed.

Other optional software upgrades can also expand coverage or capacity. IP Site Connect dramatically improves customer service and productivity by using the Internet to extend coverage to create a wide area network, enhancing single site coverage or geographically linking dispersed locations. Capacity Plus single-site trunking expands capacity to over 1,000 users without adding new frequencies. Linked Capacity Plus leverages the high capacity of Capacity Plus, with the wide area coverage capabilities of IP Site Connect to keep your staff connected with an affordable wide area trunking solution. So whether you want expanded coverage at a single site or across multiple ones, the XPR 3000 Series can be scaled to your business and budget.

## DAY-IN, DAY-OUT DURABILITY

The XPR 3000 Series meets demanding specs, including IP55 for water protection and U.S. Military 810 C, D, E, F and G. It's backed by a two-year Standard Warranty and minimum one-year warranty for accessories.



## XPR 3000 SERIES SPECIFICATIONS

GENERAL SPECIFICATIONS					
		DISPLAY XPR 3500		NON DISPLAY XPR 3300	
		VHF	UHF	VHF	UHF
Channel Capacity		128	128	16	16
Frequency		136-174 MHz		403-512 MHz	
IMPRES Hi-Cap Li-ion Non-FM (2150 mAH) Battery	Height (H)	4.80 inch / 122 mm		4.80 inch / 122 mm	
	Width (W)	2.20 inch / 56 mm		2.20 inch / 56 mm	
	Thickness (T)	1.64 inch / 41.7 mm		1.64 inch / 41.7 mm	
	Weight	10.8 oz (305 g)		10.0 oz (285 g)	
IMPRES SLIM Li-ion (1500 mAh) Battery	Height (H)	4.80 inch / 122 mm		4.80 inch / 122 mm	
	Width (W)	2.20 inch / 56 mm		2.20 inch / 56 mm	
	Thickness (T)	1.43 inch / 36.4 mm		1.43 inch / 36.4 mm	
	Weight	10.0 oz (285 g)		9.3 oz (265 g)	
Core Slim Li-Ion (1500 mAH) Battery	Height (H)	4.80 inch / 122 mm		4.80 inch / 122 mm	
	Width (W)	2.20 inch / 56 mm		2.20 inch / 56 mm	
	Thickness (T)	1.43 inch / 36.4 mm		1.43 inch / 36.4 mm	
	Weight	10.0 oz (285 g)		9.3 oz (265 g)	
Power Supply		7.5 V (Nominal)			
Operating Temperature		-30°- +60° C			
FCC Description		ABZ99FT3088	ABZ99FT4089	ABZ99FT3088	ABZ99FT4089
IC Description		109AB-99FT3088	109AB-99FT4089	109AB-99FT3088	109AB-99FT4089
IMPRES SLIM Li-ion (1500 mAh) Battery	Analog: 8 hrs		Analog: 8 hrs		
	Digital: 11.5 hrs		Digital: 11.5 hrs		
Core Slim Li-Ion (1500 mAH) Battery	Analog: 11.5 hrs		Analog: 11.5 hrs		
	Digital: 16.5 hrs		Digital: 16.5 hrs		
IMPRES Hi-Cap Li-ion Non-FM (2150 mAH) Battery		Analog: 11.5 hrs		Analog: 11.5 hrs	
		Digital: 16.5 hrs		Digital: 16.5 hrs	

Average battery life at 5/5/90 duty cycle with carrier squelch and transmitter in high power.

MILITARY STANDARDS: DISPLAY & NON-DISPLAY										
810C			810D		810E		810F		810G	
APPLICABLE MIL-STD	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES
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

**PRODUCT SPEC SHEET**

**MOTOTRBO™ XPR 3000 SERIES PORTABLE RADIOS**

RECEIVER		
	VHF	UHF
Frequencies	136-174 MHz	403-512 MHz
Channel Spacing	12.5 kHz / 25 kHz*	
Frequency Stability	± 0.5 ppm	
Analog Sensitivity (12dB SINAD) 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	

ENVIRONMENTAL SPECIFICATIONS: DISPLAY XPR 3500 & NON-DISPLAY XPR 3300	
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

Testing completed using portable radio with attached battery and antenna.

TRANSMITTER		
	VHF	UHF
Frequencies	136-174 MHz	403-512 MHz
Channel Spacing	12.5 kHz / 25 kHz*	
Frequency Stability	± 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 and Data: 7K60F1W	
Digital Vocoder Type	AMBE+2™	
Digital Protocol	-ETSI TS 102 361 -1,-2,-3	

\* 25 kHz is NOT available in the USA. FCC narrowbanding rules do not allow operation of this model on 25 kHz configuration in Part 90 VHF/UHF frequencies.

Please contact your Motorola sales representative for battery runtime expectations based on your specific radio configuration.

Specifications subject to change without notice. All specifications shown are typical.

Radio meets applicable regulatory requirements. Version 1 08/11

For more information on how to reach it all with digital, visit [motorolasolutions.com/mototrbo](http://motorolasolutions.com/mototrbo)

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