



**DIGITAL, NOW WITHIN REACH**

# MOTOTRBO™ XiR™ P6600 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. XiR P6600 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 XiR P6600 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™ XiR P6600 SERIES PORTABLE RADIOS



### INDUSTRY-LEADING AUDIO

When it comes to exceptional audio clarity, the quality of digital can't be denied. With the XiR P6600 Series portables, you get digital quality throughout your coverage area plus unique features to help your employees hear and speak clearly, wherever they work.

With Intelligent Audio, the radio volume automatically adjusts to compensate for background noise. Now, workers don't have to adjust their radio volume to avoid missing a call in loud situations or disturbing others when they move into quiet places. Increased background noise suppression filters out unwanted external clamor – from the rumble of forklifts to the buzz of school hallways. And IMPRES™ audio accessories enhance noise suppression and improve voice intelligibility for smarter audio than they've ever experienced before.

### HIGH-POWERED PERFORMANCE

Because the XiR P6600 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 fact, the leading-edge IMPRES™ technology in our batteries, chargers and audio accessories also ensures longer talk time and clearer audio.

The XiR P6600 Series offers plenty of features to make workers more efficient. Voice announcement provides audible confirmation so they can be notified of channel and zone changes as well as programmable button features without having to view the radio display. The display and easy to use navigation menu makes the radio intuitive to use so they can stay focused on the job at hand - from the hotel receptionist confirming rooms to high school security covering an event.

### 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 XiR P6600 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.

### DAY-IN, DAY-OUT DURABILITY

The XiR P6600 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.

## XiR P6600 SERIES SPECIFICATIONS

GENERAL SPECIFICATIONS					
		DISPLAY XiR P6620		NON DISPLAY XiR P6600	
		VHF	UHF	VHF	UHF
Channel Capacity		256	256	16	16
Frequency		136-174MHz	403-527 MHz	136-174 MHz	403-527 MHz
Core NiMH (1300mAh) 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)	1.55 inch / 39.4 mm		1.55 inch / 39.4 mm	
	Weight	13.2 oz (375 g)		12.5 oz (355 g)	
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 Li-ion Slim (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
Core NiMH (1300 mAh) Battery	Analog: 7 hrs		Analog: 7 hrs		
	Digital: 10 hrs		Digital: 10 hrs		
IMPRES SLIM Li-ion (1500 mAh) Battery Core Slim Li-ion (1500 mAh) Battery	Analog: 8 hrs		Analog: 8 hrs		
	Digital: 11.5 hrs		Digital: 11.5 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™ XiR P6600 SERIES PORTABLE RADIOS**

RECEIVER		
	VHF	UHF
Frequencies	136-174 MHz	403-527 MHz
Channel Spacing	12.5/25 kHz	
Frequency Stability	± 0.5 ppm	
Analog Sensitivity (12dB SINAD) Typical	0.3uV 0.22uV (typical)	
Digital Sensitivity	0.25 uV (0.19 uV typical)	
Intermodulation (TIA603D)	70 dB	
Adjacent Channel Selectivity (TIA603A)-1T	60dB @ 12.5kHz / 70dB @ 25 kHz	
Adjacent Channel Selectivity (TIA603D)-2T	45dB @ 12.5kHz / 70dB @ 25 kHz	
Spurious Rejection (TIA603D)	70 dB	
Rated Audio	0.5W	
Audio Distortion @ Rated Audio	5% 3% (typical)	
Hum and Noise	-40dB @ 12.5kHz / -45dB @ 25 kHz	
Audio Response	TIA603D	
Conducted Spurious Emission (TIA603D)	-57 dBm	

**ENVIRONMENTAL SPECIFICATIONS:  
DISPLAY XiR P6620 & NON-DISPLAY XiR P6600**

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	403-527 MHz
Channel Spacing	12.5/25kHz	
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 @ 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	12.5kHz Data: 7K60F1D & 7K60FXD	
	12.5kHz 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	

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.

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

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**MOTOTRBO**  
DIGITAL  
REMASTERED.