



YOUR VOICE JUST GOT STRONGER

MOTOTRBO™ XPR™ 7000 SERIES DIGITAL TWO-WAY PORTABLE RADIOS



From the factory worker building components to the road crew making repairs, MOTOTRBO can transform your enterprise and make employee interactions smarter and safer. Our best-in-class audio and unrivaled data capabilities empower people like never before.

Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. XPR 7000 Series radios integrate voice and data seamlessly, offer enhanced features that are easy to use, and deliver business-critical advantages like integrated Bluetooth® and Intelligent Audio.

The XPR 7000 Series can remaster your workplace and the way people collaborate to help you achieve even greater efficiency.

AUDIO BEYOND EXPECTATIONS

When it comes to exceptional audio clarity, the quality of digital can't be denied. XPR 7000 Series portables give you digital audio performance 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 so workers don't have to adjust their radio volume to avoid missing a call in loud situations or disturb others when they move into quiet areas. Increased background noise suppression helps filter out unwanted external clamor – from heavy equipment to the roar of engines.

Bluetooth® audio is embedded right in the radio, so no adapter is needed when using wireless accessories. Also, IMPRES™ audio accessories enhance noise suppression and improve voice intelligibility for smarter accessories than they've ever experienced before.

INDUSTRY-LEADING DATA

XPR 7000 Series radios feature integrated Bluetooth® data, so rather than waiting until the end of a shift, busy work crews can send real time information back to the office, saving valuable hours and enabling better decision making. Integrated GPS enables location tracking of mobile work teams and text messaging enables communication when voice isn't feasible. And the large, full-color, 5-line display operates in day or night mode, for easy viewing of contact lists, text messages and work order tickets even in bright sunlight.

MOTOTRBO's Application Developer Program offers customized data applications so you can adapt your radios to your business challenges. With the largest developer program in the industry, data applications help meet your objectives - from work order ticket management to telephony integration, and more.

HIGH-POWERED PERFORMANCE

Because MOTOTRBO uses TDMA digital technology, you get integrated voice and data, twice the calling capacity and clearer voice communications. When it comes to battery performance, MOTOTRBO radios operate up to 40 percent longer between recharges compared to analog.

RICH FUNCTIONALITY

XPR 7000 Series radios offer plenty of features businesses seek - including enhanced call signaling, basic and enhanced privacy-scrambling, option board expandability and the transmit interrupt suite to prioritize critical communication the moment you need it. Programmable button features appear on the display for easy viewing and guick access. And when workers can't be distracted, customizable voice announcement provides audible confirmation of channel and zone changes as well as programmable button features, eliminating the need to view the display.

EXPANDED CAPACITY AND COVERAGE

Your workforce is hard at work every day – picking up loads, making road repairs, providing security, responding to guest requests or restoring power after a storm.

IP Site Connect helps to dramatically improve customer service and productivity by using the Internet to extend coverage to create a wide area network, enhance single site coverage or link geographically dispersed locations. Capacity Plus single-site trunking expands capacity to over 1,000 users without having to add 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 coverage at a single site or across multiple ones, MOTOTRBO can be scaled to your business and budget.

MIGRATE AT YOUR OWN PACE

Keeping operations running smoothly during a change in communication systems is vital to any business. It's easy to migrate to digital with XPR 7000 Series radios because they operate in analog and digital mode. To ease the transition even further, 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

XPR 7000 Series radios meet the most demanding specs, including IP57 for water submersibility and U.S. Military 810 C, D, E, F, & G standards for exceptional durability. The radio is also "intrinsically safe" when purchased and equipped with an intrinsically safe (FM) battery, for use in environments where flammable gas, vapors or combustible dust may be present. And it's backed by a two-year Standard Warranty, one-year Repair Service Advantage (US)/Extended Warranty (Canada) and minimum 1-year warranty for batteries and accessories.



KEEP YOUR BUSINESS RUNNING SMOOTHLY WITH BUSINESS APPLICATIONS:



Location tracking:

Monitor the whereabouts of mobile workers so they can respond immediately; in an emergency, you can pinpoint security personnel and send the nearest to the scene



Integrated Bluetooth® for

sharing data wirelessly and instantly between devices



Dispatch consoles for centralized

communication



Email gateways to connect to email from your radio



Network monitoring

to maximize system utilization



Man-down applications so

radios call for help when workers can't



Telephony for communication between radios and landline or mobile phones









XPR 7000 SERIES SPECIFICATIONS

GENERAL SPECIFICATION	IS								
		FUL	L DISPLAY AND KEY	'PAD	NO DISPLAY OR KEYPAD				
		XPR	7550	XPR 7580	XPR	XPR 7350			
		VHF	UHF	800/900	VHF	UHF	800/900		
Channel Capacity		1000			32				
				806-825 MHz			806-825 MHz		
Eraguanav		136-174 MHz	403-512 MHz	851-870 MHz	136-174 MHz	403-512 MHz	851-870 MHz		
Frequency		130-174 IVITZ	403-312 IVIDZ	896-902 MHz	130-174 IVITZ		896-902 MHz		
				935-941 MHz			935-941 MHz		
MPRES Hi-Cap Li-ion 2150 mAH	(HxWxL)		13 inch / 2.17 inch / 1.62 ir 80.3 mm / 55.2 mm / 41.1 n		5.13 inch / 2.17 inch / 1.56 inch (130.3 mm / 55.2 mm / 39.6 mm)				
Battery (PMNN4409)	Weight	12.54 oz	(355.5 g)	12.35 oz (350.0 g)	11.39 oz (323 g)		11.20 oz (318 g)		
Slim IMPRES Li-ion 1500 mAH	(HxWxL)		13 inch / 2.17 inch / 1.41 in 0.3 mm / 55.2 mm / 35.8 r		5.13 inch / 2.17 inch / 1.35 inch (130.3 mm / 55.2 mm / 34.3 mm)				
Battery (PMNN4407)	Weight	11.83 oz	(335.5 g)	11.64 oz (330.0 g)	10.69 oz (303 g)		10.49 oz (298 g		
MPRES Hi-Cap Li-ion FM	(HxWxL)		13 inch / 2.17 inch / 1.62 ir 80.3 mm / 55.2 mm / 41.1 n		5.13 inch / 2.17 inch / 1.56 inch (130.3 mm / 55.2 mm / 39.6 mm)				
2300 mAH Battery (NNTN8129)	Weight	12.89 oz	(365.5 g)	12.70 oz (360.0 g)	11.75 oz (333 g)		11.55 oz (328 g)		
Power Supply		7.5 V (Nominal)							
Operating Temperature		-30°C -+60°C¹							
FCC Description		ABZ99FT3085	ABZ99FT4086	ABZ99FT5014	ABZ99FT3085	ABZ99FT4086	ABZ99FT5014		
IC Description		109AB-99FT3085	109AB-99FT4086	109AB-99FT5014	109AB-99FT3085	109AB-99FT4086	109AB-99FT501		

BATTERY								
Average Battery Life Analog / Digital, conventional operation, 5/5/90 duty cycle with carrier squelch and transmitter in high power ²								
Slim IMPRES Li-ion 1500 mAh Battery	Analog: 7.7 hrs/ Digital: 11.3 hrs	9.5 hrs / 12.0 hrs	Analog: 8 hrs/ Digital: 11.8 hrs	9.7 hrs / 12.5 hrs				
IMPRES Hi-Cap Li-ion 2150 mAH Battery	Analog: 11.1 hrs/Digital: 16.2 hrs	13.5 hrs / 17.0 hrs	Analog: 11.5 hrs/Digital: 17 hrs	14.0 hrs / 17.8 hrs				
IMPRES Hi-Cap Li-ion FM 2300 mAH Battery	Analog: 11.9 hrs/Digital: 17.3 hrs	14.5 hrs / 18.2 hrs	Analog: 12.3 hrs/Digital: 18.1 hrs	15.0 hrs / 19.0 hrs				

RECEIVER						
	VHF	UHF	800/900			
Channel Spacing		12.5/25 kHz ³				
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm					
Analog Sensitivity (12dB SINAD)	nalog Sensitivity (12dB SINAD) 0.3uV (0.22uV typical)					
Digital Sensitivity (5% BER)		0.25uV (0.19uV typ)				
Intermodulation (TIA603D)		70 dB				
Adjacent Channel Selectivity (TIA603A)-1T	60dB @ 12.5 kHz / 70dB @ 25 kHz ³					
Adjacent Channel Selectivity (TIA603D)-2T	45dB @ 12.5 kHz / 70dB @ 25 kHz³					
Spurious Rejection (TIA603D)		70 dB				
Rated Audio		0.5W				
Audio Distortion @ Rated Audio		5% (3% typical)				
Hum and Noise	-40dB @	2 12.5 kHz / -45dB @	25 kHz³			
Audio Response		TIA603D				
Conducted Spurious Emission (TIA603D)		-57dBm				

TRANSMITTER					
	VHF	UHF	800/900		
Channel Spacing		12.5/25 kHz ³			
Frequency Stability	± 1.5 ppm				
Low Power Output	1W	1W	1W		
High Power Output	5W	4W	2.5W		
Modulation Limiting	± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz³				
FM Hum and Noise	-40dB@ 12.5 kHz / -45dB@ 25 kHz³				
Conducted/Radiated Emission	-36 dBm < 1GHz / -30 dBm > 1GHz				
Adjacent Channel Power	60dB @ 12.5 kHz / 70dB @ 25 kHz ³				
Audio Response	TIA603D				
Audio Distortion	3%				
	12.5 kHz Data: 7K60F1D & 7K60FXD				
4FSK Digital Modulation	12.5 kHz Voice: 7K60F1E & 7K60FXE				
	Combination of 12.5 kHz Voice & Data: 7K60F1W				
Digital Vocoder Type	AMBE+2™				
Digital Protocol	E.	TSI TS 102 361-1, -2,	-3		



PRODUCT SPEC SHEET

MOTOTRBO XPR 7000 SERIES PORTABLE RADIOS

GPS	
Accuracy specs are for long-term tracking (95t satellites visible at nominal -130 dBm signal st	
TTFF (Time To First Fix) - Cold Start	< 60 seconds
TTFF (Time To First Fix) - Hot Start	< 10 seconds
Horizontal Accuracy	< 5 meters

BLUETOOTH	
Version	Supports Bluetooth® 2.1 + EDR Specification
Range	Class 2, 10 meters

FACTORY MUTUAL APPROVALS

MOTOTRBO XPR 7000 Series portable radios have been certified by FM in accordance with U.S. Codes as intrinsically safe for use in Class I, II, III, Division 1, Groups C, D, E, F, G, when properly equipped with a Motorola FM approved battery option. They are also approved for use in Class I, Division 2, Groups A, B, C, D.

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	IEC 60529 - IP57					
Packaging test	MIL-STD 810D and E					

Testing completed using portable radio with attached battery and antenna.

8/900 BAND SUPPORT

XPR 7380 and XPR7580 radios support only the following frequencies:

TX: 806.0125, 806.5125, 807.0125, 807.5125, 808.0125, 809.000 - 820.9875, 821.0125, 821.5125, 822.0125, 822.5125, 823.0125, 824.000 - 825.000 and 896.000 - 902.000.

TX/RX: 851.0125, 851.5125, 852.0125, 852.5125, 853.0125, 854.000 - 865.9875, 866.0125, 866.5125, 867.0125, 867.5125, 868.0125, 869.000 - 870.000 and 935.000 - 941.000

- ¹ Radio only Li-lon battery -10°C to +60°C
- ² Actual battery runtime observed may vary based on the use of certain features such as GPS, Bluetooth, and Expansion Card based applications.

Battery life for trunking operation may be up to 30% less than for conventional operation.

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

³ 25kHz channel available in Canada only. 25kHz channel not available for 900 band.

MILITARY STANDARDS										
	810C		810D		810E		810F		810G	
APPLICABLE MIL-STD	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES
Low Pressure	500.1	1	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	1, 11	506.3	1, 11	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	1/24	514.6	II/5
Shock	516.2	1, 11	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, VI

For more information on how to strengthen your portable voice, visit motorolasolutions.com/mototrbo

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

Radio meets applicable regulatory requirements. Version 2 01/13

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