



**THE FUTURE OF BUSINESS COMMUNICATION, DELIVERED TODAY**

# MOTOTRBO™ XPR™ 6100 DIGITAL TWO-WAY PORTABLE RADIO

Make technology more productive and personal. You asked for a forward-thinking way to connect your people to their work, wherever they go. An innovative business tool that increases their efficiency while lowering your costs. Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. With increased capacity, exceptional voice quality and long battery life, MOTOTRBO keeps your work teams connected when communication is a must.

## **HIGH-POWERED PERFORMANCE**

Because MOTOTRBO uses TDMA digital technology, it delivers twice the calling capacity plus clearer voice communications. When it comes to battery performance, MOTOTRBO radios operate 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.

## **MIGRATE AT YOUR OWN PACE**

Keeping operations running smoothly during a change in communication systems is vital to your business. It's easy to migrate to digital with MOTOTRBO because 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 you can begin migrating to digital at your own pace.

## **RELIABLE DURABILITY**

MOTOTRBO meets the most demanding specs, including U.S. Military 810 C, D, E, F and G as well as Motorola standards for durability and reliability. The XPR 6100 is backed by a two-year Standard Warranty and minimum 1-year warranty for accessories.

**PRODUCT SPEC SHEET**  
**MOTOTRBO™ XPR™ 6100 PORTABLE RADIO\***

**GENERAL SPECIFICATIONS**

	NON-DISPLAY XPR 6100			MILITARY STANDARDS: NON-DISPLAY XPR 6100				
	VHF	UHF Band I	UHF Band II		810E		810F	
Channel Capacity		32		Applicable MIL-STD	Methods	Procedures	Methods	Procedures
Frequency	136-174 MHz	403-470 MHz	450-512 MHz	Low Pressure	500.3	II	500.4	II
Dimensions	5.18 in H x 2.5 in W x 1.39 in L (131.5 mm H x 63.5 mm W x 35.2 mm L)			High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
				Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
				Temperature Shock	503.3	I/A, 1C3	503.4	I
Weight (with IMPRES Li-Ion 1500 mAh Battery) (with IMPRES Li-Ion 2150 mAh Battery)	11.63 oz (330 g) 12.12 oz (345 g)			Solar Radiation	505.3	I	505.4	I
Power Supply	7.5 V nominal			Rain	506.3	I, II	506.4	I, III
FCC Description	AZ489FT3815	AZ489FT4876	AZ489FT4884	Humidity	507.3	II	507.4	-
IC Description	109U-89FT3815	109U-89FT4876	109U-89FT4884	Salt Fog	509.3	I	509.4	I
Average battery life at 5/5/90 duty cycle with battery saver enabled in carrier squelch and transmitter in high power.				Dust	510.3	I	510.4	I
IMPRES Li-Ion 1500 mAh Battery	Analog: 9 hrs Digital: 13 hrs			Vibration	514.4	I/10, II/3	514.5	I/24
IMPRES Li-Ion 2150 mAh Battery	Analog: 13.5 hrs Digital: 19 hrs			Shock	516.4	I, IV	516.5	I, IV
<b>RECEIVER: NON-DISPLAY XPR 6100</b>				<b>ENVIRONMENTAL SPECIFICATIONS: NON-DISPLAY XPR 6100</b>				
Frequencies	136-174 MHz	403-470 MHz	450-512 MHz	Operating Temperature	-30° C / +60° C***			
Channel Spacing	12.5 kHz / 25 kHz**			Storage Temperature	-40° C / +85° C			
Frequency Stability (-30° C, +60° C, +25° C)	+/- 0.5 ppm			Thermal Shock	Per MIL-STD			
Analog Sensitivity (12dB SINAD)	0.35 uV 0.22 uV (typical)			Humidity	Per MIL-STD			
Digital Sensitivity	5% BER: 0.3 uV			ESD	IEC-801-2KV			
Intermodulation (TIA603C)	70 dB			Dust and Water Intrusion	IEC 60529 - IP54			
Adjacent Channel Selectivity TIA603	60 dB @ 12.5 kHz, 70 dB @25 kHz**			Packaging Test	MIL-STD 810D and E			
Adjacent Channel Selectivity TIA603C	45 dB @ 12.5 kHz, 70 dB @25 kHz**			Testing completed using portable radio with attached battery and antenna.				
Spurious Rejection (TIA603C)	70 dB			*The XPR 6100 supports a subset of the Analog and Digital features available in higher tier models. Please consult your Motorola Solutions representative for more details.				
Rated Audio	500 mW			**25 kHz will not be available on new equipment in the U.S. after 1/1/2013.				
Audio Distortion @ Rated Audio	3% (typical)			***Radio only. Li-Ion battery -10° C.				
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz**			Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements. Version 1 01/12				
Audio Response	TIA603C							
Conducted Spurious Emission (TIA603C)	-57 dBm							
<b>TRANSMITTER: NON-DISPLAY XPR 6100</b>								
Frequencies	136-174 MHz	403-470 MHz	450-512 MHz					
Channel Spacing	12.5 kHz / 25 kHz**							
Frequency Stability (-30° C, +60° C, +25° C Ref.)	+/- 0.5 ppm							
Low Power Output	1 W	1 W						
High Power Output	5 W	4 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	TIA603C							
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 TS 102 361-1, -2, -3							

For more information on how to make your business more efficient and better connected, visit [www.motorola.com/mototrbo](http://www.motorola.com/mototrbo).

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