

# MOTOTRBO™ XPR™ 7000e SERIES

YOU'RE COMPLETELY CONNECTED.

With this dynamic evolution of MOTOTRBO digital two-way radios, you're better connected, safer and more productive. The XPR 7000e Series is designed for the skilled professional who refuses to compromise. With high performance integrated voice and data, and advanced features for efficient operation, these next-generation radios deliver complete connectivity to your organization.

## CONNECTED

The MOTOTRBO XPR 7000e Series is a family of DMR-standard digital radios that delivers operations-critical voice and data communications. Bluetooth® audio lets you talk without wires, integrated Wi-Fi® enables remote software updates, and indoor and outdoor location-tracking capabilities give you total visibility of your resources. Built-in WAVE™ OnCloud support keeps you connected over Wi-Fi when you leave your MOTOTRBO coverage area\*. With support for trunking as well as legacy analog technology, you can keep your organization connected as it grows.

## SAFE

Safeguard your staff with responsive push-to-talk technology. The prominent orange emergency button on XPR 7000e Series radios summons help with one touch, using Transmit Interrupt to clear a channel when necessary. On radios with full keypads, the Channel Lock feature disables the Channel knob, keeping you from accidentally disconnecting. An integrated accelerometer senses if you've fallen, and can initiate a call for assistance. The radio is tested tough to military standards and is waterproof to IP68. It won't let you down.

## PRODUCTIVE

Text messaging and Work Order Ticketing simplify complex communications, and data capabilities support advanced applications. Featuring a powerful audio amplifier, these radios deliver loud, clear speech, with industrial noise cancellation for better intelligibility. The latest energy technology delivers up to 29 hours of battery life for 3-shift working, and an improved receiver boosts range by up to 8%.



## NEXT GENERATION FEATURES

- Integrated accelerometer for optional Man Down
- Bluetooth® 4.0
- WAVE OnCloud support\*
- Indoor location tracking
- Integrated Wi-Fi®
- Over-the-air software updates
- Enhanced audio quality
- Channel lock (full-keypad models)
- Improved expandability
- Better battery life (up to 29 hrs)
- Better range (up to 8%)
- Better waterproofing (IP68)

\* Service subscription required



## GENERAL SPECIFICATIONS

Model Number	FULL KEYPAD (FKP) MODEL			NO KEYPAD (NKP) MODEL		
	XPR 7550e	XPR 7580e	XPR 7580e	XPR 7350e	XPR 7380e	XPR 7380e
Band	VHF	UHF	800/900	VHF	UHF	800/900
Frequency	136-174 MHz	403-527 MHz	806-825 MHz, 851-870 MHz, 896-902 MHz, 935-941 MHz	136-174 MHz	403-527 MHz	806-825 MHz, 851-870 MHz, 896-902 MHz, 935-941 MHz
High Power Output	5 W	4 W	2.5 W	5 W	4 W	2.5 W
Low Power Output	1 W	1 W	1 W	1 W	1 W	1 W
Channel Spacing	12.5, 25* kHz					
Channel Capacity	1000			32		
Dimensions (H x W x D), Radio + Slim Battery	5.1 x 2.2 x 1.4 in (130 x 55 x 36 mm)			5.1 x 2.2 x 1.3 in (130 x 55 x 34 mm)		
Weight, Radio + Slim Battery	11 oz (315 g)			10 oz (290 g)		
Dimensions (H x W x D), Radio + High Capacity Battery	5.1 x 2.2 x 1.6 in (130 x 55 x 41 mm)			5.1 x 2.2 x 1.6 in (130 x 55 x 40 mm)		
Weight, Radio + High Capacity Battery	12 oz (347 g)			11 oz (322 g)		
FCC Description	AZ489FT7066	AZ489FT7065	AZ489FT7067	AZ489FT7066	AZ489FT7065	AZ489FT7067
IC Description	109U-89FT7066	109U-89FT7065	109U-89FT7067	109U-89FT7066	109U-89FT7065	109U-89FT7067
Digital / Analog Battery Life <sup>1</sup> , Slim 2100 mAh Battery	20.0 / 15.0 hrs	19.0 / 14.5 hrs	19.0 / 15.5 hrs	20.0 / 15.0 hrs	19.0 / 14.5 hrs	19.0 / 15.5 hrs
Digital / Analog Battery Life <sup>1</sup> , High Capacity 3000 mAh Battery	29.0 / 22.0 hrs	28.0 / 21.5 hrs	28.0 / 23.0 hrs	29.0 / 22.0 hrs	28.0 / 21.5 hrs	28.0 / 23.0 hrs
Power Supply (Nominal)	7.5 V					



## TRANSMITTER SPECIFICATIONS

Channel Spacing	12.5, 25* kHz
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD, 12.5 kHz Voice: 7K60F1E and 7K60FXE, Combination of 12.5 kHz Voice and Data: 7K60F1W
Digital Protocol	ETSI TS 102 361-1, -2, -3
Conducted/Radiated Emissions (TIA603D)	-36 dBm < 1GHz, -30 dBm > 1GHz
Adjacent Channel Power	60dB (12.5 kHz channel), 70dB (25* kHz channel)
Frequency Stability	± 0.5 ppm

## RECEIVER SPECIFICATIONS

Analog Sensitivity (12dB SINAD)	0.16 uV (0.22 uV for 800/900 band)
Digital Sensitivity (5% BER)	0.14 uV (0.19 uV for 800/900 band)
Intermodulation (TIA603D)	70 dB
Adjacent Channel Selectivity, (TIA603A)-1T	60 dB (12.5 kHz channel), 70 dB (25* kHz channel)
Adjacent Channel Selectivity, (TIA603D)-2T	45 dB (12.5 kHz channel), 70 dB (25* kHz channel)
Spurious Rejection (TIA603D)	70 dB

## AUDIO SPECIFICATIONS

Digital Vocoder Type	AMBE+2™
Audio Response	TIA603D
Audio Output Power	Rated: 0.5 W @ 1% distortion Maximum: 2.5 W
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25* kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm

### NOTES

1: Typical battery life, 5/5/90 profile at maximum transmitter power with GNSS, Bluetooth, Wi-Fi and Option Board applications disabled. Actual observed runtimes may vary.  
2: Specialized low-temperature battery required for operation below 14 °F (-10 °C).  
Specifications are subject to change without notice. All specifications shown are typical values.

\* 25 kHz channels not available in USA.

## GENERAL

- VHF Band, 5 W
- UHF Band, 4 W
- 800/900 Band, 2.5 W
- FKP Model: Full Keypad, Color Screen, 1000 Channels
- NKP Model: No Keypad or Screen, 32 Channels
- Analog and Digital
- Voice and Data
- Integrated Wi-Fi
- Canned Text Messaging
- Freeform Text Messaging (FKP)
- Text to Speech
- Work Order Ticketing
- Indoor Location Tracking
- Event-Driven Location Update
- Bluetooth Audio
- Bluetooth Data
- Voice Announcement
- Home Channel Reminder
- Option Board
- Late Entry
- Priority Scan

◦ Optional

## BLUETOOTH SPECIFICATIONS

Version	4.0
Range	Class 2, 33 ft (10 m)
Supported Profiles	Bluetooth Headset Profile (HSP), Serial Port Profile (SPP), Motorola fast push-to-talk.
Simultaneous Connections	1 x audio accessory and 1 x data device
Permanent Discoverable Mode	Standard

## GNSS SPECIFICATIONS

Constellation Support	GPS
Time To First Fix, Cold Start	< 60 s
Time To First Fix, Hot Start	< 10 s
Horizontal Accuracy	< 16.5 ft (< 5 m)

## WI-FI SPECIFICATIONS

Standards Supported	IEEE 802.11b, 802.11g, 802.11n
Security Protocol Supported	WPA, WPA-2, WEP
Maximum Number of SSIDs	128 (64 for NKP Models)

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature <sup>2</sup>	-22 °F to 140 °F (-30 °C to +60 °C)
Storage Temperature	-40 °F to 185 °F (-40 °C to +85 °C)
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
Electrostatic Discharge	IEC 61000-4-2 Level 4
Dust and Water Intrusion	IEC 60529 - IP68, 6.6 ft (2 m) for 2 hrs
Salt Fog	5% NaCl for 8 hrs at 35 °C, 16 hrs standing
Packaging Test	MIL-STD 810D and E

## HAZLOC CERTIFICATION

When properly equipped with Motorola UL-Approved battery, XPR 7000e Series radios are UL Approved to TIA-4950 for use in Hazardous Locations, Division 1, Class I, II, III, Groups C,D,E, F, G; Division 2, Class 1, Groups A,B,C,D, T3C. Tamb = -25 °C to +60 °C.

## AUDIO

- Intelligent Audio
- IMPRES Audio
- Acoustic Feedback Suppressor
- Microphone Distortion Control
- User-Selectable Audio Profiles
- Trill Enhancement
- SINC+ Noise Cancellation

## CUSTOMIZATION

- Wide Range of Accessories
- GCAI Accessory Connector
- Multi-Button PTT
- 6 Programmable Buttons (FKP)
- 4 Programmable Buttons (NKP)
- Day/Night Screen Mode (FKP)
- Emergency Button

## MANAGEMENT

- Radio Management
- Over-the-Air Programming
- Over-the-Air Software Update
- IMPRES Energy
- IMPRES Battery Mgt
- Over-the-Air Battery Mgt

## SAFETY

- Integrated Accelerometer
- Man Down
- Lone Worker
- Basic and Enhanced Privacy
- Transmit Interrupt
- Digital Emergency
- Emergency Search Tone
- Remote Monitor
- Radio Disable / Enable
- Waterproof to IP68
- Rugged to MIL-STD 810
- HazLoc Certification

## SYSTEMS

- Dual Capacity Direct Mode
- Conventional
- IP Site Connect
- Capacity Plus Single/Multi Site
- Capacity Max
- Connect Plus

## MILITARY STANDARDS

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	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 Temp	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/A1
Low Temp	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temp Shock	503.1	I	503.2	I/A1/C3	503.3	A1/C3	503.4	I	503.5	I-C
Solar Radiation	505.1	II	505.2	I/Hot-Dry	505.3	I/Hot-Dry	505.4	I/Hot-Dry	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/Hot-Humid	507.3	II/Hot-Humid	507.4	-	507.5	II/Hot-Humid
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-	509.5	-
Dust	510.1	I, II	510.2	I, II	510.3	I, II	510.4	I, II	510.5	I, II
Vibration	514.2	VIII/F, W, XI	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24, II/5	514.6	I/24, II/5
Shock	516.2	II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV

To get connected with MOTOTRBO, please contact your local Motorola representative or visit [motorolasolutions.com/MOTOTRBO](https://motorolasolutions.com/MOTOTRBO)



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