



# 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%.



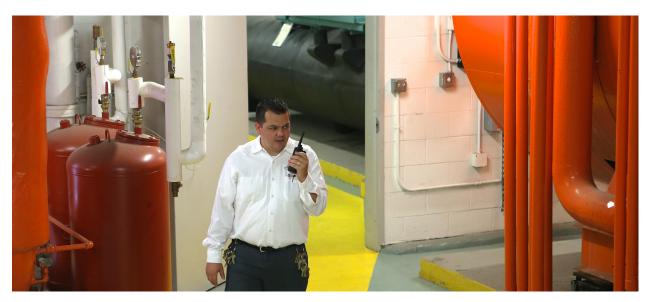
## NEXT GENERATION FEATURES

- Integrated accelerometer for ontional Man Down
- Pluotooth® 1
- WAVE Opcland aupport
- Indeer leastion tracking
- Integrated Wi-Fi®
- Over-the-air software updates
- Channel lock (full-keyns
- models)
- Improved expandabilit
- Better battery life (up to 29 hrs)
- Better range (up to 8)
- Better waterproofing (IP68)





	Fi	ull Keypad (FKP) Mod	el	No Keypad (NKP) Model				
Model Number	XPR 7550e		XPR 7580e	XPR 7	XPR 7380e			
Band	VHF	UHF	800/900	VHF UHF		800/900		
GENERAL SPECIFICATIONS								
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	2.2 x 1.4 in (130 x 55 x 3	6 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	2.2 x 1.6 in (130 x 55 x 4	1 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							



**PRODUCT DATA SHEET** | MOTOTRBO™ XPR™ 7000e SERIES DIGITAL TWO-WAY RADIOS

#### ALL MODELS

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				
Rated Audio	0.5 W				
Audio Distortion at Rated Audio	3%				
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25* kHz channel)				
Conducted Spurious Emissions (TIA603D)	-57 dBm				

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.

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					

#### 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.

#### CONNECTION

- 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
- Bluetoth Data
- Voice Announcement
- Home Channel Reminder
- Option Board

#### **AUDIO**

- Intelligent Audio
- IMPRES Audio
- Acoustic Feedback Suppressor
- Microphone Distortion Control
- User-Selectable Audio Profiles
- Trill Enhancement
- o 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
- 0 Over-the-Air Programming
- Over-the-Air Software Update
- IMPRES Energy
- 0 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

Optional

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	1	500.2	II	500.3	II	500.4	II	500.5	II
High Temp	501.1	1, 11	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	1	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	1	503.2	I/A1/C3	503.3	A1/C3	503.4	1	503.5	I-C
Solar Radiation	505.1	Ш	505.2	I/Hot-Dry	505.3	I/Hot-Dry	505.4	I/Hot-Dry	505.5	I-A1
Rain	506.1	1, 11	506.2	1, 11	506.3	1, 11	506.4	1, 111	506.5	1, 111
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	1	509.2	I	509.3	I	509.4	-	509.5	-
Dust	510.1	1, 11	510.2	1, 11	510.3	1, 11	510.4	1, 11	510.5	1, 11
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

<sup>\* 25</sup> kHz channels not available in USA.

#### **BLUETOOTH**

Connect to your radio without wires, for extra comfort and safety. A full portfolio of Bluetooth headsets and earpieces is available.



#### **REMOTE SPEAKER MICROPHONE**

Improve usability with a Remote Speaker Microphone (RSM). Choose from standard, heavy duty and noisecancelling models, with or without secondary earpiece connector.



#### **SMART ENERGY**

Motorola's patented IMPRES™ Energy technology gives you smart batteries to keep your radio powered for longer. Choose from a range of batteries, chargers, and management tools.



#### **EARPIECES**

For all-day comfort, choose from our range of earpieces. Lightweight or heavy duty, discreet or rugged, with or without built-in hearing protection.



#### **CARRY SOLUTIONS**

However you choose to wear or carry your radio, we have a solution for you. From leather cases to belts and belt clips to bags, straps and pouches.



#### **HEADSETS**

In a noisy workplace, you need to protect your workers' hearing. Whether it's heavy duty noise reduction or innovative temple transducer technology, our headsets can help.



#### **SCREEN PROTECTORS**

In ultra-harsh environments, your radio's screen can get scratched and abraded. Keep it clear and readable with these durable pre-cut screen protectors.



### **VIBRATING BELTCLIP**

When it's unacceptable to miss calls in a noisy environment, equip your radios with a powerful vibrating belt clip for an extra physical alert.



For more details on XPR 7000e accessories, please download the MOTOTRBO Professional Accessories Catalog.

To get connected with MOTOTRBO, please contact your local Motorola representative or visit motorolasolutions.com/MOTOTRBO

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