

MOTOTRBO™ XPR™ 7580e IS

**SAFE AND
STRONG**



GENERAL SPECIFICATIONS

Model Number	XPR7580e IS
Band	800 & 900 MHz
Frequency	800 MHz: 806 – 825 MHz; 851 – 870 MHz 900 MHz: 896 – 902 MHz; 935 – 941 MHz
High Power Output	2.5 W
Low Power Output	1 W
Channel Spacing	800 MHz: 12.5kHz/25 kHz 900 MHz: 12.5 kHz
Channel Capacity	1000
Zone Capacity	250
Dimensions (H x W x D), Radio + NNTN8386 Battery	138.5 x 56.7 x 39.8 mm
Weight, Radio + NNTN8386 Battery	483 g
FCC Description	N/A
IC Description	109U-89FT7091
Digital / Analog Battery Life with NNTN8386 Battery ¹	Typical: Analog: 12 hrs / Digital: 16 hrs Minimum: Analog: 10 hrs / Digital: 13.5 hrs
Power Supply (Nominal)	7.5 V nominal
Frequency Stability	+/-0.5 ppm

TRANSMITTER SPECIFICATIONS

4FSK Digital Modulation	12.5 kHz Data Only: 7K60F1D & 7K60FXD 12.5 kHz Voice Only: 7K60F1E & 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)
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25 kHz channel)
Modulation Limiting	±2.5 KHz (12.5 kHz channel), ±5.0 KHz (25 kHz channel)

RECEIVER SPECIFICATIONS

Analog Sensitivity (12dB SINAD)	0.25 uV (Min), 0.20uV (Typical)
Digital Sensitivity (5% BER)	0.23 uV (Min), 0.19uV (Typical)
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
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25 kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm

AUDIO SPECIFICATIONS

Digital Vocoder Type	AMBE+2TM
Audio Response	TIA603C/D
Rated Audio	0.5 W
Audio Distortion at Rated Audio	5%

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

GPS SPECIFICATIONS

Constellation Support	GPS
Time To First Fix, Cold Start	< 60 s
Time To First Fix, Hot Start	< 10 s
Horizontal Accuracy	< 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

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature ²	-30 C to +60 C
Storage Temperature ²	-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, 2 m for 2 hrs
Salt Fog	Per MIL-STD
Packaging Test	MIL-STD 810D and E

CSA157 CERTIFICATION

XPR7580e IS has been certified by Canadian Standards Association (CSA) as intrinsically safe for use in Division 1, Class I, Groups A, B, C, D, Class II, Groups E, F, G, and Class III, when properly equipped with a Motorola CSA approved battery NNTN8386. They are also approved for use in Class I, Division 2, Groups A, B, C and D. Temperature Code T4.

NOTES

1: Typical battery life, 5/5/90 profile at maximum transmitter power with GNSS, Bluetooth, and Wi-Fi based applications disabled. Actual observed runtimes may vary.

2: Radio only. Battery specifications may be different

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



XPR7580e IS has been certified by Canadian Standards Association (CSA) as intrinsically safe for use in Division 1, Class I, Groups A, B, C, D, Class II, Groups E, F, G, and Class III, when properly equipped with a Motorola CSA approved battery NNTN8386. They are also approved for use in Class I, Division 2, Groups A, B, C and D. Temperature Code T4.

KEY FEATURES

CONNECTION

- 800/900 Band, 2.5 W
- FKP Model: Full Keypad, Color Screen, 1000 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 and 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
- SINC+ Noise Cancellation
- Mute Mode
- Rx Audio Leveling

CUSTOMIZATION

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

MANAGEMENT

- Radio Management
- Over-the-Air Programming
- Over-the-Air Software Update (Wi-Fi)
- 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
- CSA157 certification

SYSTEMS

- Dual Capacity Direct Mode
- Conventional
- IP Site Connect
- Capacity Plus (Single and Multi-Site)
- Capacity Max
- Connect Plus

• = STANDARD ◦ = 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	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/A1
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/C3, II/C1
Temperature Shock	503.1	I	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/AGG
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	I	516.3	I	516.4	I	516.5	I	516.6	I
Shock (Drop)	516.2	II	516.3	IV	516.4	IV	516.5	IV	516.6	IV

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

Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2017 Motorola Solutions, Inc. All rights reserved. 03-2017

