

## PRODUCT SPEC SHEET

MOTOTRBO XPR™ 6580/6380 SMARTNET®/PRIVACY PLUS™ ANALOG TRUNKED PORTABLE RADIOS



**MAKE THE RIGHT MOVE FOR YOUR WORKFORCE**

# MOTOTRBO™ ANALOG TRUNKED PORTABLE RADIOS

Are you looking for a better way to connect your workforce? Leverage your analog system while you equip employees with future-ready technology that is easy to use? Improve performance, increase productivity and add value to your organization?

Versatile and powerful, MOTOTRBO is the professional radio communications system that works with analog until you are ready to move to digital. You get all the benefits of MOTOTRBO two-way radios – like leading-edge IMPRES™ technology, high battery capacity and outstanding water submersibility – while you continue to use analog trunking.

When you are ready to migrate to digital, use the same MOTOTRBO analog radios with just a software upgrade. Then enjoy all the advantages digital trunking delivers – from integrated data applications and longer battery life to clearer audio and greater capacity.

## FLEXIBLE, RELIABLE CALLING

Whether you're supervising a busy manufacturing line or updating a security team handling the crowd in a casino, SMARTNET and SmartZone™ analog trunked portable radios are designed to keep up with your demands and keep you all connected. Not only are these MOTOTRBO portables easy to use, they offer exceptional functionality with just the touch of a button – essential for workers with gear and workers on the go.

SMARTNET features include call alert, private call, telephone interconnect, emergency call/alarm, busy queue and callback, recent user priority, push-to-talk ID, priority monitor scan, message/transmission trunking, dynamic regrouping and selective radio inhibit.\*

SmartZone includes all SMARTNET features plus wide area seamless roaming, RSSI operation, preferred site and forced site search.

## VERSATILE FUNCTIONALITY

MOTOTRBO analog trunked portable radios operate in both 800 and 900 MHz. The system is so versatile, you can use it on analog

Conventional and Type II 800/900 MHz Privacy Plus enhanced, SMARTNET, StartSite™, SmartWorks™ and SmartZone trunked systems.\*

## INCREASED CAPACITY SYSTEMWIDE

The MOTOTRBO XPR 6580 display portable radio supports up to 20 trunked systems and a maximum of 240 channels or trunked personalities radio-wide (16 maximum per zone).

## EASY TO MOVE TO DIGITAL

All it takes is a software upgrade to move your MOTOTRBO radios from analog trunking to Capacity Plus single-site or Connect Plus multi-site digital trunking. No additional hardware is required.

## LEADING-EDGE IMPRES TECHNOLOGY

Batteries, chargers and audio accessories feature our innovative and trusted IMPRES technology to maximize talk time and offer exceptionally clear audio quality. You can experience IMPRES features on analog today, and have them migrate with you when you move to digital.

## LONG BATTERY LIFE

IMPRES Li-Ion 2150 mAh batteries are designed for and are standard in MOTOTRBO analog trunked portable radios. They provide up to 12 hours of battery life – ideal for long work shifts.

## INTRINSICALLY SAFE

Purchased with the FM approved IMPRES Li-Ion 1400 mAh battery, you can use MOTOTRBO portables in locations where flammable gas, vapors or combustible dust may be present.

## RELIABLE DURABILITY

MOTOTRBO portables meet the most demanding specs, including an IP57 rating for water submersibility, U.S. Military 810 C, D, E and F, and our exacting standards for durability and reliability. The system is backed by a two-year Standard Warranty, one-year Repair Service Advantage (US)/Extended Warranty (Canada) and minimum 1-year warranty for accessories.

\*Some features need to be supported and enabled in the trunked system

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### MOTOTRBO™ XPR™ 6580/6380 SMARTNET®/PRIVACY PLUS™ ANALOG TRUNKED PORTABLE RADIOS

#### GENERAL SPECIFICATIONS

	Display XPR 6580	Non-Display XPR 6380
Frequency band	800 and 900 MHz	
No. of Systems	20	
Zone Capacity	130	2
Max. No. of Conv. Channels or Personality Capacity	240	32
Talkgroup Capacity per Zone	16	
Dimensions with Li-Ion non-FM battery	5.18 in H x 2.40 in W x 1.38 in L 131.5 mm H x 61 mm W x 35 mm L	
Weight with Li-Ion non-FM battery	12.7 oz (360 gr)	10.75 oz (305 gr)
Power Supply	7.5 V Nominal	
FCC Description	ABZ99FT5011	
IC Description	109AB-99FT5011	
Average battery life with IMPRES Li-Ion 2150 mAh battery (5/5/90 duty cycle)	12 hrs	
Average battery life with IMPRES Li-Ion 1400 mAh battery (5/5/90 duty cycle)	8 hrs	
Trunking System Support	Type II 800/900 MHz Privacy Plus Enhanced, SMARTNET, StartSite™, SmartWorks™ and SmartZone™ analog trunked systems	

#### TRANSMITTER

Frequencies <sup>1</sup>	800 MHz: 809-821 MHz and 824-825 MHz 900 MHz: 896-902 MHz
Talkaround	800 MHz: 854-866 MHz and 869-870 MHz 900 MHz: 935-941 MHz
Channel Spacing	800 MHz: 12.5 and 25 kHz 900 MHz: 12.5 kHz
Frequency Stability (-30°C, +60°C)	+/- 0.5 ppm
Low Power Output	1 W
High Power Output	2.5 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 / Rated Emission (ETSI)	-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 (per EIA)	3%
FM Modulation	12.5 kHz: 11K0F3E 25 kHz: 16K0F3E

#### RECEIVER

	Display XPR 6580	Non-Display XPR 6380
Frequencies	800 MHz: 854-866 MHz and 869-870 MHz 900 MHz: 935-941 MHz	
Channel Spacing	800 MHz: 12.5 and 25 kHz 900 MHz: 12.5 kHz	
Frequency Stability (-30°C, +60°C, +25°C)	+/- 0.5 ppm	
Analog Sensitivity (12 dB SINAD) Typical	0.25 uV	
Intermodulation (TIA603C)	70 dB	
Adjacent Channel Selectivity (TIA603) - 1T	60 dB @ 12.5 kHz 70 dB @ 25 kHz	
Adjacent Channel Selectivity (TIA603C) - 2T	45 dB @ 12.5 kHz 70 dB @ 25 kHz	
Spurious Rejection (TIA603C)	70 dB	
Rated Audio	5 W	
Audio Distortion @ Rated Audio	3% (typical)	
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz	
Audio Response	TIA603C	
Conducted Spurious Emission (ETSI)	-57 dBm	

#### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature (Radio Only)	-30°C to +60°C
Operating Temperature (with IMPRES Li-Ion battery)	-10°C to +60°C
Storage Temperature	-40°C to +85°C
Thermal Shock	per MIL-STD
Humidity	per MIL-STD
ESD	IEC-801-2KV
Water Intrusion	IEC 60529 - IP57
Packaging Test	MIL-STD 810D and E

#### FACTORY MUTUAL APPROVALS

MOTOTRBO XPR Portable series radios have been certified by FM Approvals in accordance with Canada and 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.



<sup>1</sup>No 806-809 MHz or 821-824 MHz(NPSAC) channels trunked capability.  
NPSAC Mutual Aid Conventional Channels supported:

TX	TX
806.0125	821.0125
806.5125	821.5125
807.0125	822.0125
807.5125	822.5125
808.0125	823.0125

For digital mode and GPS receiver specifications, please refer to MOTOTRBO XPR digital model specifications in 800/900 MHz. For frequencies 901-902, 940-941 MHz, FCC Rule 24 limits power to 7W ERP. Antennas HAF4025\_ and HAF4029\_ can be used with reduced power setting for these frequencies. Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements. Version 1 11/09

For more information on how to make the right move for your workforce, visit [www.motorola.com/mototrbo](http://www.motorola.com/mototrbo).

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