

PRODUCT SPEC SHEET

MOTOTRBO XPR™ 4580/4380 SMARTNET®/PRIVACY PLUS™ ANALOG TRUNKED MOBILE RADIOS



GET READY TO GET CONNECTED TO THE FUTURE

MOTOTRBO™ ANALOG TRUNKED MOBILE RADIOS

How do you connect your workforce, wherever they go? Equip them with future-ready technology that is easy to use? And increase their performance and productivity without sacrificing value? Versatile and powerful, MOTOTRBO is the ideal solution. It's the professional two-way radio communication system that works with your existing analog technology until you are ready to move to digital.

You gain the many benefits of MOTOTRBO two-way radios – like leading-edge IMPRES™ audio accessories and tough-as-nails durability – while you use your current analog trunking system. When you are ready to migrate, use the same MOTOTRBO radios with just a software upgrade, and enjoy all the advantages digital trunking delivers – from integrated data applications to clearer audio and greater capacity.

FLEXIBLE, RELIABLE CALLING

Do you want to connect to a fleet of drivers stretched across a city? Or a crew clearing debris from a busy highway? SMARTNET and SmartZone™ analog trunked mobile radios are designed for these kinds of daily demands, and more. Not only are they easy to use, they offer exceptional functionality with just the touch of a button – essential for workers on the move.

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 mobile 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.*

GREATER CAPACITY AND CHANNELS

The MOTOTRBO XPR 4580 display mobile supports up to 20 trunked systems and a maximum of 240 channels or trunked personalities radio-wide (240 maximum per zone).

EASY TO MIGRATE 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 AUDIO

Audio accessories feature our innovative and trusted IMPRES technology for exceptionally clear audio quality.

RELIABLE DURABILITY

MOTOTRBO meets the most demanding specs, including 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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GENERAL SPECIFICATIONS

	Display XPR 4580	Numeric Display XPR 4380
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	240	32
Dimensions with Li-Ion non-FM battery	2.01 in H x 6.89 in W x 8.11 in L 51 mm H x 175 mm W x 206 mm L	
Weight	4.0 Lbs. (1.8 kg)	
Power Supply	12 V dc Negative Ground	
FCC Description	ABZ99FT5010	
IC Description	109AB-99FT5010	
Trunking System Support	Type II 800/900 MHz Privacy Plus Enhanced, SMARTNET, StartSite™, SmartWorks™ and SmartZone™ analog trunked systems	

TRANSMITTER

Frequencies ¹	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	10 W
High Power Output	800 MHz: 35W 900 MHz: 30W
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	-50 dB @ 12.5 kHz -60 dB @ 25 kHz
Audio Response	TIA603C
Audio Distortion (per EIA)	3%
FM Modulation	12.5 kHz: 11K0F3E 25 kHz: 16K0F3E

RECEIVER

	Display XPR 4580	Numeric Display XPR 4380
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	0.22 uV	
Intermodulation (TIA603C)	78 dB	
Adjacent Channel Selectivity (TIA603) - 1T	65 dB @ 12.5 kHz 75 dB @ 25 kHz	
Adjacent Channel Selectivity (TIA603C) - 2T	50 dB @ 12.5 kHz 75 dB @ 25 kHz	
Spurious Rejection (TIA603C)	75 dB	
Rated Audio	3 W (internal)	
Audio Distortion @ Rated Audio	3% (typical)	
Hum and Noise	-45 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
Storage Temperature	-40°C to +85°C
Thermal Shock	per MIL-STD
Humidity	per MIL-STD
ESD	IEC-801-2KV
Water Intrusion	IEC 60529 - IP54
Packaging Test	MIL STD 810D and E

¹No 806-809 MHz or 821-824 MHz(NPSPAC) channels trunked capability.

NPSPAC 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 get ready to connect to the future of professional communications, visit www.motorola.com/mototrbo.

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