



YOUR VOICE JUST GOT STRONGER

MOTOTRBO™ XPR™ 7000 SERIES DIGITAL TWO-WAY PORTABLE RADIOS



From the factory worker building components to the road crew making repairs, MOTOTRBO can transform your enterprise and make employee interactions smarter and safer. Our best-in-class audio and unrivaled data capabilities empower people like never before.

Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. XPR 7000 Series radios integrate voice and data seamlessly, offer enhanced features that are easy to use, and deliver business-critical advantages like integrated Bluetooth® and Intelligent Audio.

The XPR 7000 Series can remaster your workplace and the way people collaborate to help you achieve even greater efficiency.

PRODUCT SPEC SHEET

MOTOTRBO XPR 7000 SERIES PORTABLE RADIOS

AUDIO BEYOND EXPECTATIONS

When it comes to exceptional audio clarity, the quality of digital can't be denied. XPR 7000 Series portables give you digital audio performance throughout your coverage area plus unique features to help your employees hear and speak clearly, wherever they work.

With Intelligent Audio, the radio volume automatically adjusts to compensate for background noise so workers don't have to adjust their radio volume to avoid missing a call in loud situations or disturb others when they move into quiet areas. Increased background noise suppression helps filter out unwanted external clamor – from heavy equipment to the roar of engines.

Bluetooth® audio is embedded right in the radio, so no adapter is needed when using wireless accessories. Also, IMPRES™ audio accessories enhance noise suppression and improve voice intelligibility for smarter accessories than they've ever experienced before.

INDUSTRY-LEADING DATA

XPR 7000 Series radios feature integrated Bluetooth® data, so rather than waiting until the end of a shift, busy work crews can send real time information back to the office, saving valuable hours and enabling better decision making. Integrated GPS enables location tracking of mobile work teams and text messaging enables communication when voice isn't feasible. And the large, full-color, 5-line display operates in day or night mode, for easy viewing of contact lists, text messages and work order tickets even in bright sunlight.

MOTOTRBO's Application Developer Program offers customized data applications so you can adapt your radios to your business challenges. With the largest developer program in the industry, data applications help meet your objectives – from work order ticket management to telephony integration, and more.

HIGH-POWERED PERFORMANCE

Because MOTOTRBO uses TDMA digital technology, you get integrated voice and data, twice the calling capacity and clearer voice communications. When it comes to battery performance, MOTOTRBO radios operate up to 40 percent longer between recharges compared to analog.

RICH FUNCTIONALITY

XPR 7000 Series radios offer plenty of features businesses seek – including enhanced call signaling, basic and enhanced privacy-scrambling, option board expandability and the transmit interrupt suite to prioritize critical communication the moment you need it. Programmable button features appear on the display for easy viewing and quick access. And when workers can't be distracted, customizable voice announcement provides audible confirmation of channel and zone changes as well as programmable button features, eliminating the need to view the display.

EXPANDED CAPACITY AND COVERAGE

Your workforce is hard at work every day – picking up loads, making road repairs, providing security, responding to guest requests or restoring power after a storm.

IP Site Connect helps to dramatically improve customer service and productivity by using the Internet to extend coverage to create a wide area network, enhance single site coverage or link geographically dispersed locations. Capacity Plus single-site trunking expands capacity to over 1,000 users without having to add new frequencies. Linked Capacity Plus leverages the high capacity of Capacity Plus, with the wide area coverage capabilities of IP Site Connect to keep your staff connected with an affordable wide area trunking solution. So whether you want coverage at a single site or across multiple ones, MOTOTRBO can be scaled to your business and budget.

MIGRATE AT YOUR OWN PACE










Keeping operations running smoothly during a change in communication systems is vital to any business. It's easy to migrate to digital with XPR 7000 Series radios because they operate in analog and digital mode. To ease the transition even further, the dynamic mixed mode repeater functionality streamlines automatic switching between analog and digital calls. So you can begin using MOTOTRBO radios and repeaters on your existing analog system, and when your time and budget allow, move to digital at your own pace.

DAY-IN, DAY-OUT DURABILITY

XPR 7000 Series radios meet the most demanding specs, including IP57 for water submersibility and U.S. Military 810 C, D, E, F, & G standards for exceptional durability. The radio is also "intrinsically safe" when purchased and equipped with an intrinsically safe (FM) battery, for use in environments where flammable gas, vapors or combustible dust may be present. And it's backed by a two-year Standard Warranty, one-year Repair Service Advantage (US)/Extended Warranty (Canada) and minimum 1-year warranty for batteries and accessories.



KEEP YOUR BUSINESS RUNNING SMOOTHLY WITH BUSINESS APPLICATIONS:

-  **Location tracking:** Monitor the whereabouts of mobile workers so they can respond immediately; in an emergency, you can pinpoint security personnel and send the nearest to the scene
-  **Integrated Bluetooth®** for sharing data wirelessly and instantly between devices
-  **Dispatch consoles** for centralized communication
-  **Email gateways** to connect to email from your radio
-  **Network monitoring** to maximize system utilization
-  **Man-down applications** so radios call for help when workers can't
-  **Telephony** for communication between radios and landline or mobile phones
-  **Text messaging** for quick and discreet communication
-  **Work order tickets** for faster customer response

XPR 7000 SERIES SPECIFICATIONS

| GENERAL SPECIFICATIONS | | | | | | | |
|---|---------|---|----------------|----------------------|---|----------------|------------------|
| FULL DISPLAY AND KEYPAD | | | | NO DISPLAY OR KEYPAD | | | |
| | | XPR 7550 | | XPR 7580 | XPR 7350 | | XPR 7380 |
| | | VHF | UHF | 800/900 | VHF | UHF | 800/900 |
| Channel Capacity | | 1000 | | | 32 | | |
| Frequency | | 136-174 MHz | 403-512 MHz | 806-825 MHz | 136-174 MHz | 403-512 MHz | 806-825 MHz |
| | | | | 851-870 MHz | | | 851-870 MHz |
| | | | | 896-902 MHz | | | 896-902 MHz |
| | | | | 935-941 MHz | | | 935-941 MHz |
| IMPRES Hi-Cap Li-ion 2150 mAh Battery (PMNN4409) | (HxWxL) | 5.13 inch / 2.17 inch / 1.62 inch (130.3 mm / 55.2 mm / 41.1 mm) | | | 5.13 inch / 2.17 inch / 1.56 inch (130.3 mm / 55.2 mm / 39.6 mm) | | |
| | Weight | 12.54 oz (355.5 g) | | 12.35 oz (350.0 g) | 11.39 oz (323 g) | | 11.20 oz (318 g) |
| Slim IMPRES Li-ion 1500 mAh Battery (PMNN4407) | (HxWxL) | 5.13 inch / 2.17 inch / 1.41 inch (130.3 mm / 55.2 mm / 35.8 mm) | | | 5.13 inch / 2.17 inch / 1.35 inch (130.3 mm / 55.2 mm / 34.3 mm) | | |
| | Weight | 11.83 oz (335.5 g) | | 11.64 oz (330.0 g) | 10.69 oz (303 g) | | 10.49 oz (298 g) |
| IMPRES Hi-Cap Li-ion FM 2300 mAh Battery (NNTN8129) | (HxWxL) | 5.13 inch / 2.17 inch / 1.62 inch (130.3 mm / 55.2 mm / 41.1 mm) | | | 5.13 inch / 2.17 inch / 1.56 inch (130.3 mm / 55.2 mm / 39.6 mm) | | |
| | Weight | 12.89 oz (365.5 g) | | 12.70 oz (360.0 g) | 11.75 oz (333 g) | | 11.55 oz (328 g) |
| Power Supply | | 7.5 V (Nominal) | | | | | |
| Operating Temperature | | -30°C - +60°C ¹ | | | | | |
| FCC Description | | ABZ99FT3085 | ABZ99FT4086 | ABZ99FT5014 | ABZ99FT3085 | ABZ99FT4086 | ABZ99FT5014 |
| IC Description | | 109AB-99FT3085 | 109AB-99FT4086 | 109AB-99FT5014 | 109AB-99FT3085 | 109AB-99FT4086 | 109AB-99FT5014 |

| BATTERY | | | | |
|--|---|---------------------|--------------------------------------|---------------------|
| Average Battery Life | Analog / Digital, conventional operation, 5/5/90 duty cycle with carrier squelch and transmitter in high power ² | | | |
| Slim IMPRES Li-ion 1500 mAh Battery | Analog: 7.7 hrs / Digital: 11.3 hrs | 9.5 hrs / 12.0 hrs | Analog: 8 hrs / Digital: 11.8 hrs | 9.7 hrs / 12.5 hrs |
| IMPRES Hi-Cap Li-ion 2150 mAh Battery | Analog: 11.1 hrs / Digital: 16.2 hrs | 13.5 hrs / 17.0 hrs | Analog: 11.5 hrs / Digital: 17 hrs | 14.0 hrs / 17.8 hrs |
| IMPRES Hi-Cap Li-ion FM 2300 mAh Battery | Analog: 11.9 hrs / Digital: 17.3 hrs | 14.5 hrs / 18.2 hrs | Analog: 12.3 hrs / Digital: 18.1 hrs | 15.0 hrs / 19.0 hrs |

| RECEIVER | | | |
|---|--|-----|---------|
| | VHF | UHF | 800/900 |
| Channel Spacing | 12.5/25 kHz ³ | | |
| Frequency Stability (-30°C, +60°C, +25°C Ref) | ± 0.5 ppm | | |
| Analog Sensitivity (12dB SINAD) | 0.3uV (0.22uV typical) | | |
| Digital Sensitivity (5% BER) | 0.25uV (0.19uV typ) | | |
| Intermodulation (TIA603D) | 70 dB | | |
| Adjacent Channel Selectivity (TIA603A)-1T | 60dB @ 12.5 kHz / 70dB @ 25 kHz ³ | | |
| Adjacent Channel Selectivity (TIA603D)-2T | 45dB @ 12.5 kHz / 70dB @ 25 kHz ³ | | |
| Spurious Rejection (TIA603D) | 70 dB | | |
| Rated Audio | 0.5W | | |
| Audio Distortion @ Rated Audio | 5% (3% typical) | | |
| Hum and Noise | -40dB @ 12.5 kHz / -45dB @ 25 kHz ³ | | |
| Audio Response | TIA603D | | |
| Conducted Spurious Emission (TIA603D) | -57dBm | | |

| TRANSMITTER | | | |
|---|--|-----|---------|
| | VHF | UHF | 800/900 |
| Channel Spacing | 12.5/25 kHz ³ | | |
| Frequency Stability (-30°C, +60°C, +25°C Ref) | ± 0.5 ppm | | |
| Low Power Output | 1W | 1W | 1W |
| High Power Output | 5W | 4W | 2.5W |
| Modulation Limiting | ± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz ³ | | |
| FM Hum and Noise | -40dB @ 12.5 kHz / -45dB @ 25 kHz ³ | | |
| Conducted/Radiated Emission | -36 dBm < 1GHz / -30 dBm > 1GHz | | |
| Adjacent Channel Power | 60dB @ 12.5 kHz / 70dB @ 25 kHz ³ | | |
| Audio Response | TIA603D | | |
| Audio Distortion | 3% | | |
| 4FSK Digital Modulation | 12.5 kHz Data: 7K60F1D & 7K60FXD | | |
| | 12.5 kHz Voice: 7K60F1E & 7K60FXE | | |
| | Combination of 12.5 kHz Voice & Data: 7K60F1W | | |
| Digital Vocoder Type | AMBE+2™ | | |
| Digital Protocol | ETSI TS 102 361-1, -2, -3 | | |

PRODUCT SPEC SHEET
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GPS

Accuracy specs are for long-term tracking (95th percentile values>5 satellites visible at nominal -130 dBm signal strength)

| | |
|---------------------------------------|--------------|
| TTFF (Time To First Fix) - Cold Start | < 60 seconds |
| TTFF (Time To First Fix) - Hot Start | < 10 seconds |
| Horizontal Accuracy | < 5 meters |

BLUETOOTH

| | |
|---------|---|
| Version | Supports Bluetooth® 2.1 + EDR Specification |
| Range | Class 2, 10 meters |

FACTORY MUTUAL APPROVALS

MOTOTRBO XPR 7000 Series portable radios have been certified by FM in accordance with 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.

ENVIRONMENTAL SPECIFICATIONS

| | |
|--------------------------|-----------------------|
| Operating Temperature | -30°C / +60°C |
| Storage Temperature | -40°C / +85°C |
| Thermal Shock | Per MIL-STD |
| Humidity | Per MIL-STD |
| ESD | IEC 61000-4-2 Level 3 |
| Dust and Water Intrusion | IEC 60529 - IP57 |
| Packaging test | MIL-STD 810D and E |

Testing completed using portable radio with attached battery and antenna.

8/900 BAND SUPPORT

XPR 7380 and XPR7580 radios support only the following frequencies:

TX: 806.0125, 806.5125, 807.0125, 807.5125, 808.0125, 809.000 - 820.9875, 821.0125, 821.5125, 822.0125, 822.5125, 823.0125, 824.000 - 825.000 and 896.000 - 902.000.

TX/RX: 851.0125, 851.5125, 852.0125, 852.5125, 853.0125, 854.000 - 865.9875, 866.0125, 866.5125, 867.0125, 867.5125, 868.0125, 869.000 - 870.000 and 935.000 - 941.000

¹ Radio only - Li-Ion battery -10°C to +60°C

² Actual battery runtime observed may vary based on the use of certain features such as GPS, Bluetooth, and Expansion Card based applications.

Battery life for trunking operation may be up to 30% less than for conventional operation.

Please contact your Motorola sales representative for battery runtime expectations based on your specific radio configuration.

³ 25kHz channel available in Canada only. 25kHz channel not available for 900 band.

MILITARY STANDARDS

| APPLICABLE MIL-STD | 810C | | 810D | | 810E | | 810F | | 810G | |
|--------------------|--------|-----------------|--------|-------------|--------|-------------|--------|---------------|--------|------------|
| | METHOD | PROCEDURES | METHOD | PROCEDURES | METHOD | PROCEDURES | METHOD | PROCEDURES | METHOD | PROCEDURES |
| 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 |
| 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, II |
| Temperature Shock | 503.1 | - | 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 |
| Salt fog | 509.1 | - | 509.2 | - | 509.3 | - | 509.4 | - | 509.5 | - |
| Dust | 510.1 | I | 510.2 | I | 510.3 | I | 510.4 | I | 510.5 | I |
| Vibration | 514.2 | VIII/F, Curve-W | 514.3 | I/10, II/3 | 514.4 | I/10, II/3 | 514.5 | I/24 | 514.6 | II/5 |
| Shock | 516.2 | I, II | 516.3 | I, IV | 516.4 | I, IV | 516.5 | I, IV | 516.6 | I, IV, VI |

For more information on how to strengthen your portable voice, visit motorolasolutions.com/mototrbo

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