**SPECIFICATION SHEET**
MOTOTRBO™
XiR P8260/P8268/P8200/P8208
PORTABLE RADIOS

## IDEAL COMMUNICATION SOLUTION FOR YOUR BUSINESS

# MOTOTRBO™

## XiR P8260/P8268/P8200/P8208 PORTABLE RADIOS

Motorola is a company of firsts with a rich heritage of innovation. We continue to invent what's next – connecting people, delivering mobility and making technology personal. Versatile and powerful, MOTOTRBO combines the best in two-way radio functionality with digital technology, making it the ideal communication solution for your business. You get enhanced features, increased capacity, integrated data applications, exceptional voice quality and extended battery performance. This means more productive employees and lower operating costs for your business.

- **Integrates Voice and Data** into one device to increase your operational efficiency and support integrated applications including MOTOTRBO Text Messaging Services. Also features an integrated GPS module for use with third-party location tracking applications.
- Uses Time-Division Multiple-Access (TDMA) digital technology to provide **Twice The Calling Capacity** (as compared to analog or FDMA radios) for the price of one frequency license. A second call doesn't require a second repeater, saving you equipment costs.
- In digital mode, provides **Clearer Voice Communications** throughout the coverage area, as compared to analog radios, rejecting static and noise.
- Offers **Enhanced Battery Life**. Digital TDMA two-way portable radios can operate up to 40 percent longer between recharges compared to typical analog radios.
- Meets **Demanding Specifications** – IP57 for submersibility in water (portable models), U.S. Military 810 C, D, E and F, and Motorola standards for durability and reliability.
- Is **Intrinsically Safe***, when purchased and equipped with an FM battery, and can be used in locations where flammable gas, vapors or combustible dust may be present.
- Utilizes Motorola's **State-Of-The-Art IMPRES™ Technology** in batteries, chargers and audio accessories, providing longer talk time and clearer audio delivery.
- Features the **Transmit Interrupt Suite*** – voice interrupt, remote voice dekey, emergency voice interrupt – to help prioritize critical communication exactly when needed.
- The **IP Site Connect*** digital solution uses the Internet to extend coverage of your MOTOTRBO communication system to users anywhere in the world for dramatically improved customer service and increased productivity.
- **Capacity Plus*** is a scalable, singlesite digital trunking solution that can expand the capacity of your MOTOTRBO communication to over a thousand radio users without adding new frequencies.
- **Motorola's Application Developer Program** enables the development of customized data applications that adapt MOTOTRBO radios to meet the unique needs of your business.

*Optional feature, please indicate it when placing the radio order.

# MOTOTRBO™ PORTABLE RADIO

## GENERAL SPECIFICATIONS*

| | XiR P8260 Display Non GPS Model<br>XiR P8268 Display GPS Model | | | XiR P8200 Non-Display Non-GPS Model<br>XiR P8208 Non-Display GPS Model | | |
|---|---|---|---|---|---|---|
| | 350 MHz | UHF | VHF | 350 MHz | UHF | VHF |
| Channel Capacity | 1000 | | | 32 | | |
| Frequency | 350-400 MHz | 403-470 MHz / 450-512 MHz | 136-174 MHz | 350-400 MHz | 403-470 MHz / 450-512 MHz | 136-174 MHz |
| Dimension (HxWxT) w/ 1500 mAh Lilon Battery | 131.5 x 63.5 x 35.2 mm | | | 131.5 x 63.5 x 35.2 mm | | |
| Weight (with 1500 mAH Lilon Battery) | 360g (12.7 oz) | | | 360g (12.7 oz) | | |
| (with 2200 mAh Lilon Battery) | 361g (12.8 oz) | | | 361g (12.8 oz) | | |
| (with 1400 mAh Lilon FM Battery) | 370g (13 oz) | | | 370g (13 oz) | | |
| Power Supply | 7.5V nominal | | | 7.5V nominal | | |
| FCC Description | – | AZ489FT4876 / AZ489FT4884 | AZ489FT3815 | – | AZ489FT4876 / AZ489FT4884 | AZ489FT3815 |
| Average battery life at 5/5/90 duty cycle with battery saver enabled in carrier squelch and transmitter in high power. | | | | | | |
| IMPRES 1500 mAh Lilon Battery | Analog: 9 hrs<br>Digital: 13 hrs | | | Analog: 9 hrs<br>Digital: 13 hrs | | |
| IMPRES 2200 mAh Lilon Battery | Analog: 13.5 hrs<br>Digital: 19 hrs | | | Analog: 13.5 hrs<br>Digital: 19 hrs | | |
| IMPRES FM 1400 mAh Battery | Analog: 8.5 hrs<br>Digital: 12 hrs | | | Analog: 8.5 hrs<br>Digital: 12 hrs | | |

| **Receiver** | | | | | | |
|---|---|---|---|---|---|---|
| Frequencies | 350-400 MHz | 403-470 MHz / 450-512 MHz | 136-174 MHz | 350-400 MHz | 403-470 MHz / 450-512 MHz | 136-174 MHz |
| Channel Spacing | 12.5 kHz / 25 kHz | | | 12.5 kHz / 25 kHz | | |
| Frequency Stability | +/- 1.5 ppm (XiR P8260) | | | +/- 1.5 ppm (XiR P8200) | | |
| ( -30° C, +60° C, +25° C) | +/- 0.5 ppm (XiR P8268) | | | +/- 0.5 ppm (XiR P8208) | | |
| Analog Sensitivity | 0.35 uV (12 dB SINAD) | | | 0.35 uV (12 dB SINAD) | | |
| | 0.4 uV (20 dB SINAD) | | | 0.4 uV (20 dB SINAD) | | |
| | 0.22 uV (typical) | | | 0.22 uV (typical) | | |
| Digital Sensitivity | 5% BER: 0.3 uV | | | 5% BER: 0.3 uV | | |
| Intermodulation | | | | | | |
| TIA603C | 70 dB | | | 70 dB | | |
| ETSI | 65 dB | | | 65 dB | | |
| Adjacent Channel Selectivity | 60 dB @ 12.5 kHz | | | 60 dB @ 12.5 kHz | | |
| | 70 dB @ 25 kHz | | | 70 dB @ 25 kHz | | |
| Spurious Rejection | 70 dB | | | 70 dB | | |
| Rated Audio | 500 mW | | | 500 mW | | |
| Audio Distortion @ Rated Audio | 3% (typical) | | | 3% (typical) | | |
| Hum and Noise | -40 dB @ 12.5 kHz | | | -40 dB @ 12.5 kHz | | |
| | -45 dB @ 25 kHz | | | -45 dB @ 25 kHz | | |
| Audio Response | + 1, -3 dB | | | + 1, -3 dB | | |
| Conducted Spurious Emission | -57 dBm | | | -57 dBm | | |

| **Transmitter** | | | | | | |
|---|---|---|---|---|---|---|
| Frequencies | 350-4000 MHz | 403-470 MHz / 450-512 MHz | 136-174 MHz | 350-4000 MHz | 403-470 MHz / 450-512 MHz | 136-174 MHz |
| Channel Spacing | 12.5 kHz / 25 kHz | | | 12.5 kHz/ 25 kHz | | |
| Frequency Stability | +/- 1.5 ppm (XiR P8260) | | | +/- 1.5 ppm (XiR P8200) | | |
| ( -30° C, +60° C, +25° C) | +/- 0.5 ppm (XiR P8268) | | | +/- 0.5 ppm (XiR P8208) | | |
| Power Output | | | | | | |
| Low Power | 1W | 1W | 1W | 1W | 1W | 1W |
| High Power | 4W | 4W | 5W | 4W | 4W | 5W |
| Modulation Limiting | +/- 2.5 kHz @ 12.5 kHz | | | +/- 2.5 kHz @ 12.5 kHz | | |
| | +/- 5.0 kHz @ 25 kHz | | | +/- 5.0 kHz @ 25 kHz | | |
| FM Hum and Noise | -40 dB @ 12.5 kHz | | | -40 dB @ 12.5 kHz | | |
| | -45 dB @ 25 kHz | | | -45 dB @ 25 kHz | | |
| Conducted / Radiated Emission | -36 dBm < 1 GHz | | | -36 dBm < 1 GHz | | |
| | -30 dBm > 1 GHz and < 4GHz | | | -30 dBm > 1 GHz and < 4GHz | | |
| Adjacent Channel Power | -60 dB @ 12.5 kHz | | | -60 dB @ 12.5 kHz | | |
| | -70 dB @ 25 kHz | | | -70 dB @ 25 kHz | | |
| Audio Response | +1, -3 dB | | | +1, -3 dB | | |
| Audio Distortion | 3% | | | 3% | | |
| FM Modulation | 12.5 kHz : 11K0F3E | | | 12.5 kHz : 11K0F3E | | |
| | 25 kHz: 16K0F3E | | | 25 kHz: 16K0F3E | | |
| 4FSK Digital Modulation | 12.5 kHz Data Only: 7K60FXD | | | 12.5 kHz Data Only: 7K60FXD | | |
| | 12.5 kHz Data & Voice: 7K60FXE | | | 12.5 kHz Data & Voice: 7K60FXE | | |
| Digital Vocoder Type | AMBE+2™ | | | AMBE+2™ | | |
| Digital Protocol | ETSI-TS102 361-1 | | | ETSI-TS102 361-1 | | |

| **GPS** | |
|---|---|
| Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength) | |
| TTFF (Time To First Fix) Cold Start | < 2 minutes |
| TTFF (Time To First Fix) Hot Start | < 10 seconds |
| Horizontal Accuracy | < 10 meters |

**Factory Mutual Approvals**

MOTOTRBO XiR Portable series radios have been certifi ed 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.

| **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-801-2KV |
| Water Intrusion | IEC 60529 - IP57 |
| Packaging Test | MIL-STD 810D and E |

* Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.

Conforms to
EC 1999/5/EC (R&TTE - Radio and Telecommunications Terminal Equipment)
EN 300 086
EN 300 113

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