



XTL™ 2500 900MHz

Analog Mobile Radio



MODEL FEATURES

- Frequency Bands
 - 896-940 MHz
- Power Levels
 - 10-30 Watt (896-940 MHz)
- 512 Channels
- 3600 Analog Baud Trunking and Conventional
- Type II Trunking Only
- Bandwidth Receiver
 - 12.5 kHz (Analog) – 896-940 MHz
- 5 Programmable buttons x 4 deep in menu functions
- 14 digit character display
- Tri-color Backlit LCD display
- Emergency button
- Multi level display dim button
- Dash / Remote mount
- Meets Military Specs 810 (C,D, E and F)
- Utilizes Windows®-based customer software programming
- Built in FLASHport™ support
- Optional Keypad microphone
- External speaker
- USB / RS232 connectivity
- Optional Siren PA
- Optional DEK

Motorola's XTL 2500 900MHz mobile radio is tough and well suited for users in a chemical, manufacturing, utility, and transit environment. Taking into consideration your work environment and various job responsibilities, this robust mobile radio will support the type of consistent, high quality communication you need.

This radio also supports the accessories common to the XTL 5000 mobile radio.

The XTL 2500 mobile radio is specifically designed to meet the needs of your organization. When you want high performance, quality, and reliability in your daily communications, the XTL 2500 mobile radio is the radio of choice.

SPECIFICATION SHEET

XTL™2500 900MHz
Analog Mobile Radio

GENERAL PERFORMANCE SPECIFICATIONS

| | |
|--------------------------|-------------|
| Frequency range | 896-940 MHz |
| Modulation | Analog FM |
| Channel Bandwidth Analog | 12.5 kHz |

SPEAKER

| | |
|------------|---|
| Dimensions | 5.5" x 5.5" x 2.5" (139.7 x 139.7 x 63.5 mm) (Excluding mounting bracket) |
| Weight | 1.5 lbs (0.7 kg) |

TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS

| | |
|---|---------------------------------|
| Frequency | 896-940 MHz |
| RF Power | 10-30W |
| Max Freq Separation | Full Bandsplit |
| Freq Stability Operating Freq Accuracy (-30°C to +60°C; +25°C Ref) - 900MHz | ±1.5 ppm |
| Modulation Limiting 12.5 kHz channel | ±2.5 kHz |
| Channel Spacing Analog | 12.5 kHz |
| FM Hum and Noise 12.5 kHz | -38 dB (Hear Clear OFF) |
| Emissions | Conducted and Radiated: -70 dBc |
| Audio Response (6db/Octave Pre-emphasis from 300 to 3000 Hz) | +1, -3 dB (TIA 603) |
| Audio Distortion per EIA | 2% |

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POWER AND BATTERY DRAIN

| | |
|-----------------------------------|--------------------------|
| Model Type | 896-940 MHz |
| Minimum RF Power Output | 10-30 Watt (896-940 MHz) |
| Operation | 12V DC Negative Ground |
| Standby at 13.8V | 0.7 A |
| Receive at Rate Audio at 13.8V | 2.0 A |
| Transmit at Rated Power | 8.5 A |

RECEIVER – TYPICAL PERFORMANCE SPECIFICATIONS

| | |
|---|--|
| Frequency | 896-940 MHz |
| Channel Spacing | 12.5 kHz |
| Maximum Frequency Separation | Full Bandsplit |
| Option Pre-Amp | No |
| Analog Sensitivity | |
| 20 dB Quieting | .30 μ V |
| 12 dB SINAD per EIA | .25 μ V |
| Intermodulation | 70 dB |
| Spurious Response Rejection | 80 dB |
| Audio Output Power at 3% distortion | 7.5 W (External Speaker) 3 W (Internal Speaker) |
| Adjacent Channel Rejection Selectivity (12.5 kHz) | 65 dB |

FCC TYPE ACCEPTANCE ID

| Band | Transmitter Power Output | Number |
|-------------|--------------------------|-------------|
| 896-940 MHz | 10-30 W | AZ492FT5847 |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------|----------------|
| Operating Temperature | -30°C / +60°C |
| Storage Temperature | -55°C / +85°C |
| Ingress Protection | IP54 certified |

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MILITARY STANDARDS 810 C, D, E, & F

| | MIL-STD 810C | | MIL-STD 810D | | MIL-STD 810E | | MIL-STD 810F | |
|------------------------------|--------------|-----------------|--------------|------------|--------------|------------|--------------|------------|
| | Method | Proc./Cat. | Method | Proc./Cat. | Method | Proc./Cat. | Method | Proc./Cat. |
| Low Pressure | 500.1 | I | 500.2 | II | 500.3 | II | 500.4 | II |
| High Temperature Storage | 501.1 | I | 501.2 | I/A1 | 501.3 | I/A1 | 501.4 | I/Hot |
| High Temperature Operational | 501.1 | II | 501.2 | II/A1 | 501.3 | II/A1 | 501.4 | I/Hot |
| Low Temperature Storage | 502.1 | I | 502.2 | I/C3 | 502.3 | I/C3 | 502.4 | I/C3 |
| Low Temperature Operational | 502.1 | I | 502.2 | II/C1 | 502.3 | II/C1 | 502.4 | II/C1 |
| Temperature Shock | 503.1 | - | 503.2 | I/A1-C3 | 503.3 | I/A1-C3 | 503.4 | I/Hot-C3 |
| Solar Radiation | 505.1 | II | 505.2 | I | 505.3 | I | 505.4 | I |
| Rain Blowing | 506.1 | I | 506.2 | I | 506.3 | I | 506.4 | I |
| Rain Steady | 506.1 | II | 506.2 | II | 506.3 | II | 506.4 | III |
| Humidity | 507.1 | II | 507.2 | II | 507.3 | II | 507.4 | - |
| Salt Fog | 509.1 | - | 509.2 | - | 509.3 | - | 509.4 | - |
| Blowing Dust | 510.1 | I | 510.2 | I | 510.3 | I | 510.4 | I |
| Blowing Sand | | | 510.2 | II | 510.3 | II | 510.4 | II |
| Vibration Minimum Integrity | 514.2 | VIII/F, Curve-W | 514.3 | I/10 | 514.4 | I/10 | 514.5 | I/24 |
| Vibration Loose Cargo | | | 514.3 | II/3 | 514.4 | II/3 | 514.5 | II/5 |
| Shock Functional | 516.2 | I | 516.3 | I | 516.4 | I | 516.5 | I |
| Shock Crash Hazard | 516.2 | III | 516.3 | V | 516.4 | V | 516.5 | V |
| Shock Bench Handling | 516.2 | V | 516.3 | VI | 516.4 | VI | 516.5 | VI |



Motorola, Inc. 1301 E. Algonquin Road, Schaumburg, Illinois 60196 U.S.A. www.motorola.com/governmentandenterprise 1-800-367-2346

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