



# 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%

## SPECIFICATION SHEET

XTL™2500 900MHz  
Analog Mobile Radio

---

### 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 $\mu$ V
12 dB SINAD per EIA	.25 $\mu$ 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

## SPECIFICATION SHEET

XTL™2500 900MHz  
Analog Mobile Radio

### 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**

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

MOTOROLA and the Stylized M Logo are registered in the U.S. Patent and Trademark Office.  
All other product or service names are the property of their registered owners. © Motorola, Inc. 2007 (0710)  
R3-1-2034