# Motorola MTX850, MTX8250, MTX950 and MTX9250 Two-Way Radios

For Professional Radio Privacy Plus™ Systems

Small, Lightweight and Durable...
So advanced, it practically thinks for you.





# PLUS In addition to all the

MTX850 and MTX950 features shown left, the MTX8250 and MTX9250 models also offer:

#### Conventional Talkaround

Unit-to-unit communications, bypassing the repeater for use when outside repeater range

#### **User-Defined Lists**

Change scan, phone and call lists easily

# Telephone Interconnect Capability (Send/Receive)

Place and receive phone calls

### Front Panel

#### **Programmable Phone List**

Store and retrieve phone numbers

#### Push-to-Talk ID

Shows the identity of callers on the radio's display via name or radio ID

#### Call Alert (Send/Receive)

Notifies users that you're trying to reach them

# Private Conversation™ (Send/Receive)

Allows you to send and receive confidential calls to other users

# Intelligent Radio

So advanced, it practically thinks for you.

MTX Series Privacy Plus Radios: The Smart Business Choice...Don't wait to Make your Next Smart Move.



### **Powerful**

Innovative Motorola MTX850, MTX8250, MTX950, and MTX9250 portable two-way radios deliver everything needed for business communication. Designed to operate on Motorola's exclusive Type II and Type IIi Privacy Plus<sup>TM</sup> trunking systems, these radios can help enhance communication by providing a wider calling range, faster channel access, greater privacy and higher user and talkgroup capacity.



All of these radios offer remarkable ease of use and unsurpassed functionality at the touch of a button including:

- Scanning capabilities provide flexibility in programming so these radios will scan only selected transmissions
- Motorola Private Conversation<sup>™</sup> provides confidentiality for calls when you want to ensure others won't listen in
- Failsoft operation helps guarantee continual communication in the event of interruption of trunked system service
- Large 14-character alphanumeric display with user-friendly icons provides quick access to features and commands eliminating dedicated keys for each feature
- Easy reprogramming capabilities helps ensure radio readiness as your business grows and changes

### Reliable

For more than 65 years, Motorola has been a leader in creating state-of-the-art wireless communications for businesses like yours. Each MTX Series Privacy Plus radio is backed by a limited two-year\* warranty on parts and labor. So when you select the MTX850, MTX8250, MTX950 or MTX9250 two-way radios, you'll experience the same superior quality you've come to expect from all Motorola products. Making wise decisions is nothing new to you. So don't wait to make your next smart move.

\* Radio accessories are covered by Motorola's one-year accessories warranty.







# Motorola Two-Way Radio: Communication to Count On

Success in today's business world depends on exceptional performance. To stay ahead, you have to make every minute count — and every dollar. You also need fast, dependable access to the right people and information so you can get the job done. Two-way radio helps you stay connected so you can maximize productivity and meet your customers' demands. By simply pressing a button, you can talk with one, one dozen, or one hundred people instantly. And when you choose a Motorola Professional Radio, you know you're getting a product specifically designed to meet your needs.

The wide range of Motorola Original® accessories available for MTX Series Privacy Plus radios helps make it easy to expand and customize their capabilities to fit your business requirements.

### **Audio Accessories**

Headsets give your MTX850, MTX8250, MTX950, and MTX9250 radios enhanced sound clarity — especially useful in noisy environments. Remote speaker microphones allow radio use without lifting it out of its carry case. Comfortable earpieces mute the radio speaker and channel the audio directly to the ear, particularly useful when privacy is important.

### **Batteries and Chargers**

Motorola high and ultra high-capacity batteries boost the performance of MTX Series Privacy Plus radios to help ensure that it's ready when needed. Compact lithium ion batteries are ideal for users who prefer a slimmer, lighter radio and spark-free Factory Mutual Approved batteries are available for use in high-risk environments. Single and six-unit chargers can charge spare batteries in one to three hours, minimizing radio down time.

### **Carry Cases and Belt Clips**

Handy leather or nylon carry cases as well as belt clips are designed to help protect your MTX850, MTX8250, MTX950 or MTX9250 radio and hold it snugly in place, making it easy and comfortable to carry.



General for 800 and 900 MHz	MTX850/950	MTX8250/9250	
Channel Capacity: Trunked Systems:	9 16	15 160	
Trunked Talkgroups and Conventional Channels Combined: Trunking Signaling:	Type II and Type IIi	Type II and Type IIi	
Power Supply:	Rechargeable battery 7.5V	Rechargeable battery 7.5V	
Dimensions (H x W x D): With NiMH High Capacity Battery:	5.40 x 2.26 x 1.50 inches (137.0		
With NiMH Ultra-High Capacity Battery:	5.40 x 2.26 x 1.60 inches (137.)		
With NiCd Battery:	5.40 x 2.26 x 1.60 inches (137.0 x 57.5 x 40.0 mm)		
With Li-ion Battery:	5.40 x 2.26 x 1.30 inches (137.		
Weight: With NiMH High Capacity Battery:	15.0 oz. (420g) 15.0 oz. (420g)		
With NiMH Ultra-High Capacity Battery:	17.5 oz. (500g)	17.5 oz. (500g)	
With NiCd Battery:	15.8 oz. (450g)	15.8 oz. (450g)	
With Li-ion Battery:	12.5 oz. (350g)	12.5 oz. (350g)	
Average Battery Life @ 5/5/90 Duty Cycle (all models):	Low Power High Power	Low Power High Pov	ver
With NiMH High Capacity Battery:	9 hrs 8 hrs	9 hrs 8 hrs	
With NiMH Ultra-High Capacity Battery:	14 hrs 11 hrs	14 hrs 11 hrs	
With NiCd Battery:	9 hrs 8 hrs	9 hrs 8 hrs	
With Li-ion Battery:	9 hrs 8 hrs	9 hrs 8 hrs	
Transmitter	800 MHz (MTX 850/8250)	900 MHz (MTX950/9250	)
Frequency Range:* Transmit:	806 - 821 MHz	896 - 902 MHz	
Talkaround:	851 - 866 MHz	935 - 941 MHz	
Power Output:	2.5 W (806 - 821 MHz)	2.5 W (896 - 902 MHz)	
	2 W (851-866 MHz)	2.5 W (935 - 941 MHz)	
Frequency Stability (-30° C to +60° C, +25° Ref:	± 2.5 ppm	± 1.5 ppm	
Modulation Limiting:	± 5 KHz @ 806 - 821 MHz	± 2.5 KHz	
Emission (Conducted & Radiated):	-13 dBm per FCC	-13 dBm per FCC	
Channel Spacing:	25 KHz	12.5 KHz	
FM Hum and Noise (Companion Receiver):	-40 dB	-45 dB**	
Audio Response (from 6dB/octave pre-emphasis, 300 - 3000 Hz):	+1 to -3 dB	+1 to -3 dB	
Audio Distortion:	3%	3%	
FM Modulation:	16K0F3E	16K0F3	
Receiver			
Frequency Range:	851 - 866 MHz	935 - 941 MHz	
Hum and Noise:	-45 dB	-45 dB**	
Sensitivity (12 dB SINAD) EIA:	.35 μV	.35 μV	
Channel Spacing:	25 KHz	12.5 KHz	
Intermodulation:	-70 dB	-65 dB	
Adjacent Channel Selectivity:	-70 dB	-60 dB	
Spurious Rejection:	-70 dB	-70 dB	
Rated Audio:	0.5 W	0.5 W	
Audio Distortion @ Rated Audio:	3% typical	3% typical	
Audio Response (from 6 dB/octave de-emphasis, 300 - 3000 Hz):	+1 to -3 dB -57 dBm	+1 to -3 dB -57 dBm	
Conducted Spurious Emission:	-57 dBm	-57 dBm	
Environmental	MTX 850/8250	MTX950/9250	
Operating Temperature:	-30° to +60° C	-30° to +60° C	
Storage Temperature:	-55° to +85° C	-55° to +85° C	
Humidity:	95% RH @ 8 Hr.	95% RH @ 8 Hr.	
ESD:	IEC 801-2 KV	IEC 801-2 KV	
Water Intrusion:	IP54	IP54	
Portable Military Standards 8 1 0 C, D, & E	810C		310E
Applicable MIL-STD	Methods/Procedures		Methods/Procedures
Low Pressure:	500.1/1		500.3/2
High Temperature:	501.1/1, 2		501.3/1, 2
Low Temperature:	502.1/2		502.3/1, 2
Temperature Shock:	503.1/1		503.3/1
Solar Radiation:	505.1/1		505.3/1
Rain:	506.1/1, 2		506.3/1, 2
Humidity: Salt Fog:	507.1/2 500.1/1		507.3/2, 3 509.3/1
Salt Fog: Dust:	509.1/1 510.1/1		510.3/1
Vihration:	510.1/1		51 <i>A A/</i> 1

Applicable MIL-STD	810C Methods/Procedures	810D	810E Methods/Procedures
		Methods/Procedures	
Low Pressure:	500.1/1	500.2/2	500.3/2
High Temperature:	501.1/1, 2	501.2/1, 2	501.3/1, 2
Low Temperature:	502.1/2	502.2/1, 2	502.3/1, 2
Temperature Shock:	503.1/1	503.2/1	503.3/1
Solar Radiation:	505.1/1	505.2/1	505.3/1
Rain:	506.1/1, 2	506.2/1, 2	506.3/1, 2
Humidity:	507.1/2	507.2/2, 3	507.3/2, 3
Salt Fog:	509.1/1	509.2/1	509.3/1
Dust:	510.1/1	510.2/1	510.3/1
Vibration:	514.2/8, 10	514.3/1	514.4/1
Shock:	516.2/1, 2, 5	516.3/1, 4	516.4/1, 4*

Factory Mutual has given the MTX850, MTX8250, MTX950, and MTX9250 an intrinsically safe rating for use in classes I, II, III, Division 1, Groups C, D, E, F and G, as well as non-incendentive use in Class 1, Division 2, Groups A, B, C and D on models ordered with the Factory Mutual option.



<sup>\*</sup>Note: This equipment is not authorized by the FCC for public safety use in the 821-825/866-870 MHz band in the United States.

<sup>\*\*</sup>With Hear Clear