

# Motorola CDM1250™

The Versatile Radio



Helps keep productivity at its highest, no matter how fast your business grows.

#### Quik Call II™ and MDC 1200 Signaling (Encode/Decode)

Send and receive information via tone or digital signals

#### Multicolored LED Indicators

Visible feedback of transmit, scan, and monitor status

#### 64 Channels

#### 14-Character Alphanumeric Display

Information is clear and easy to read

**Multi-Language Capabilities**  
Programming in English, Spanish, French, or Portuguese

**RSSI Indicator**  
Displays signal strength level

**Caller ID**  
Identifies incoming callers

**X-Pand™ Audio Enhancement**  
Crisp, clear audio quality

#### 4 Customizable Function Buttons (P1, P2, P3, P4)

Program for instant access to your favorite features

#### Selective Call

Lets you call a specific group or individual

#### Dual Priority Scan

Frequently scans higher priority channels

#### Repeater Talkaround

Unit-to-unit communication, bypassing repeater

#### Emergency Signaling

Sends help signal

#### Horn and Lights Activation

Notifies user of call alerts/selective calls when away from vehicle

#### Call Alert

Notifies users that you're trying to reach them

#### Selective Call

Lets you call a specific group or individual

#### DTMF Encode

Sends pages and telephone calls

#### Optional Voice Storage

Records important messages or memos

## Additional Features

- 64 Channels
- 12.5/25 kHz Switchable Channel Spacing
- Data Capable
- Large, Easy to Use Controls
- Channel Selector Buttons
- Large Textured PTT Button on Palm Microphone
- Powerful, Front-Projecting Speaker
- Rugged, Die-Cast Chassis with Polycarbonate Outer Shell
- Remote Mountable Control Head

## Motorola Quality: More Accessible Than You Think

Perfect for growing organizations, the CDM1250™ mobile radio can readily expand to meet rapidly changing business needs. Motorola's flexible X-Pand™ audio enhancement technology and a powerful front-projecting speaker ensure superb sound clarity, even in noisy environments. The large 14-character alphanumeric display with user-friendly icons helps make information easy to understand. A full range of signaling capabilities lets you instantly see who's sending you transmissions, notifies others you're trying to reach them even when they're away from their vehicles, and programs your radio to call a specific group or individual. The versatility of the CDM1250™ mobile helps you keep productivity at its highest, no matter how fast your business grows.

# specifications

GENERAL	LOW BAND	VHF	UHF
Channel Capacity:	64	64	64
Typical RF Output:	Low Power High Power	1-25W 25-45W	1-25W 25-40W
Frequency:	29.7-36 MHz, 36-42 MHz, 42-50 MHz	136-174 MHz	403-470 MHz, 450-512 MHz
Dimensions: (HxWxD)	Low Power High Power	2.34 x 7.05 x 7.32 inch (59 x 179 x 186 mm) 2.34 x 7.05 x 7.8 inch (59 x 179 x 198 mm)	2.34 x 7.05 x 7.32 inch (59 x 179 x 186mm) 2.34 x 7.05 x 7.8 inch (59 x 179 x 198 mm)
Weight:	Low Power (1-25W) High Power	3.15 lbs. (1.43 kg) 3.5 lbs. (1.59 kg)	3.15 lbs. (1.43 kg) 3.5 lbs. (1.59 kg)
Current Drain:	Standby Rx @ rated, external 8 ohm speaker Transmit	.4A 1.5A	.3A 1.5A
FCC Description:	AZ492FT1627 (29.7-36 MHz) AZ492FT1628 (36-42 MHz) AZ492FT1626 (42-50 MHz)	AZ492FT3796 (25W) AZ492FT3795 (45W)	AZ492FT4835 (25W, 403-470 MHz) AZ492FT4830 (40W, 403-470 MHz) AZ492FT4829 (25W, 450-512 MHz) AZ492FT4836 (40W, 450-512 MHz)

## TRANSMITTER

Channel Spacing:	20/30 kHz	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30° C to +60° C, +25° Ref.)	± 5 ppm	± 2.5 ppm	± 2.5 ppm, ± 1.5 ppm UHF B2 HP
Power Output:	Low Power High Power	1-25W 25-45W	1-25W 25-40W
Modulation Limiting:	± 5.0	±2.5 @ 12.5 kHz, ±4.0 @ 20 kHz, ±5.0 @ 25 kHz	±2.5 @ 12.5 kHz, ±4.0 @ 20 kHz, ±5.0 @ 25 kHz
FM Hum and Noise:	-45dB	-40dB 12.5 kHz and -45dB 25 kHz	-40dB 12.5 kHz and -45dB 25 kHz
Conducted/Radiated Emission:	-26dBm < 1 GHz and -26dBm > 1 GHz	-36dBm < 1 GHz, -30dB > 1 GHz	-36dBm < 1 GHz and -30dBm > 1 GHz
Adjacent Channel Power:	-70dB	-60dB @ 12.5 kHz and -70dB @ 25 kHz	-60dB @ 12.5 kHz and -70dB @ 25 kHz
Audio Response:	TIA 603 & ETS 300 & CEPT84 Annex 2	TIA 603 & ETS 300 & CEPT 84 Annex 2	ETS 300 & CEPT 84 Annex 2
Audio Distortion	3% typical	3% typical	3% typical
FM Modulation:	25 kHz 16KOF3E	25 kHz 16KOF3E, 12.5 kHz 11KOF3	25 kHz 16KOF3E, 12.5 kHz 11KOF3

## RECEIVER

Frequency:	29.7-36 MHz, 36-42 MHz, 42-50 MHz	136-174 MHz	403-470 MHz, 450-512 MHz
Channel Spacing:	20 kHz	12.5/20/25 kHz	12.5/20/25 kHz
Sensitivity: (12dB SINAD)	0.3 µV, 0.25 µV typical	0.3 µV, 0.23 µV typical	0.3 µV, 0.23 µV typical
Intermodulation:	80dB typical	75dB @ 12.5 kHz, 78dB @ 25 kHz	75dB @ 12.5 kHz, 75dB @ 25 kHz
Adjacent Channel Selectivity:	80dB	65dB @12.5 kHz, 70dB @ 20 kHz, 80dB @25 kHz	65dB @12.5 kHz, 70dB @ 20 kHz, 75dB @25 kHz
Spurious Rejection:	80dB	75dB @12.5 kHz, 80dB @ 25 kHz	70dB @12.5 kHz, 75dB @ 25 kHz
Rated Audio: (external audio with 4 ohm speaker)	3W Internal Speaker, 13W External Speaker	3W Internal Speaker, 13W External Speaker	3W Internal Speaker, 13W External Speaker
Audio Distortion @ Rated Audio:	3% typical	3% typical	3% typical
Hum and Noise:	-45dB	-40dB 12.5 kHz, -45dB 25 kHz	-40dB 12.5 kHz, -45dB 25 kHz
Audio Response:	TIA603 & ETS 300 & CEPT 84 Annex 2	TIA603 & ETS 300 & CEPT 84 Annex 2	TIA603 & ETS 300 & CEPT 84 Annex 2
Conducted Spurious Emission:	-57dBm < 1 GHz, -47dBm > 1 GHz	-57dBm < 1 GHz, -47dBm > 1 GHz	-57dBm < 1 GHz, -47dBm > 1 GHz

## ENVIRONMENTAL

Operating Temperature:	-30° to +60° C	-30° to +60° C	-30° to +60° C
Storage Temperature:	-55° to +85° C	-55° to +85° C	-55° to +85° C
Thermal Shock :	-40° to +85° C	-40° to +85° C	-40° to +85° C
Humidity:	95% RH @ 8 Hr.	95% RH @ 8 Hr.	95% RH @ 8 Hr.
ESD:	IEC 801-2 KV	IEC 801-2 KV	IEC 801-2 KV
Water Intrusion:	IP54	P54	P54
Packing Test:	Impact Test	Impact Test	Impact Test

## PORTABLE MILITARY STANDARDS 810 C, D, & E\*

Applicable MIL-STD	810C	810D	810E
	Methods/Procedures	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:	506.1/2	506.2/2, 3	506.3/2
Humidity:	507.1/2	507.2/3	507.3/3
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, 5	516.3/1	516.4/1

\* MIL Standards - The CDM mobile radio is designed to meet most requirements for MIL STD 810 C, D, and E.



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