

## Professional Radio

CDM1250™  
MOBILE RADIO



### CDM1250: The Versatile Radio

Perfect for growing organizations, the flexible CDM1250™ two-way mobile can readily expand to meet rapidly changing business needs. Motorola's unique X-Pand™ audio enhancement 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.

### Additional CDM1250 Features:

- Large, easy-to-use controls
- Powerful, front-projecting speaker
- 12.5/25 kHz switchable channel spacing
- Remote mountable control head
- Data capable

**Quik Call II™ and MDC 1200 Signaling (Encode/Decode)**  
Send and receive information via tone or digital signals

**Multicolored LED Indicators**  
Clear visible feedback of transmit, scan, and monitor status

**14-Character Alphanumeric Display with User-Friendly Icons**  
Information is clear and easy to read

**Multi-Language Capabilities-**  
Can be programmed in English, Spanish, French, and Portuguese

**RSSI Indicator-**Displays signal strength level

**Caller ID-**Identifies incoming callers



64 Channels

**X-Pand Audio Enhancement**  
Crisper, clearer audio quality

**4 Customizable Function Buttons (P1, P2, P3, P4)**  
Program for instant access to favorite features and label according to function

**Dual Priority Scan**  
Frequently scans higher priority channels

**Repeater Talkaround**  
Unit-to-unit communication, bypassing the repeater

**Emergency Signaling**  
Sends help signal

**Horn and Lights Activation**  
Notifies users of call alerts/selective calls when away from vehicle

**Call Alert**  
Notifies individual users that you're trying to reach them

**Selective Call**  
Calls a specific group or individual

**DTMF Encode/Decode**  
Sends and receives pages and telephone calls

**Optional Voice Storage**  
Records important messages or personal memos

General Specifications			
	Low Band	VHF	UHF
Channel Capacity	64		
Typical RF Output Low Power High Power	40-60W	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 (H x W x L) Low Power	-----	2.34" x 7.05" x 7.32" (59 mm x 179 mm x 186 mm)	
Dimensions (H x W x L) High Power	2.39" x 7.05" x 9.84" (61 mm 179 mm x 250 mm)	2.34" x 7.05" x 7.8" (59 mm 179 mm x 198 mm)	
Weight Low Power (1-25W) High Power	4.5 lbs. (2.04 kg)	3.15 lbs. (1.43 kg) 3.5 lbs. (1.59 kg)	
Current Drain Standby Rx @ rated, external 8 ohm speaker Transmit	.4 A 1.5 A 17 A	.3 A 1.5 A 7 A @ 25W 13.5 A @ 45W	.3 A 1.5 A 8 A @ 25W 13.5 A @ 40W
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			
Specifications	Low Band	VHF	UHF
Frequencies	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	
Frequency Stability (-30° C to +60° C, +25° Ref.	± 5 ppm	± 2.5 ppm VHF, UHF B1 ± 1.5 ppm UHF B2	
Power Output Low Power High Power	40-60W	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	
FM Hum & Noise	-45 dB	-40 dB 12.5 kHz -45 dB 25 kHz	
Conducted/Radiated Emission	-26 dBm < 1 GHz -26 dBm > 1 GHz	-36 dBm < 1 GHz -30 dBm > 1 GHz	
Adjacent Channel Power	-70 dB	-60 dB @ 12.5 kHz -70 dB @ 25 kHz	
Audio Response	TIA 603 & ETS300 & CEPT 84 Annex 2		ETS 300 / CEPT 84 Annex 2
Audio Distortion	3% typical		
FM Modulation	25 kHz 16KOF3E	25 kHz 16KOF3E 12.5 kHz 11KOF3	

Receiver			
Specifications	Low Band	VHF	UHF
Frequencies	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	
Sensitivity (12 dB SINAD)	0.3 µV 0.25 µV typical	0.3 µV 0.23 µV typical	
Intermodulation	80 dB typical	75 dB @ 12.5 kHz 78 dB @ 25 kHz	75 dB @ 12.5 kHz 75 dB @ 25 kHz
Adjacent Channel Selectivity	80 dB	65 dB @ 12.5 kHz 70 dB @ 20 kHz 80 dB @ 25 kHz	65 dB @ 12.5 kHz 70 dB @ 20 kHz 75 dB @ 25 kHz
Spurious Rejection	80 dB	75 dB @ 12.5 kHz VHF 80 dB @ 25 kHz VHF	70 dB @ 12.5 kHz 75 dB @ 25 kHz
Rated Audio (external audio with 4 ohm speaker)	3W Internal 13W External		
Audio Distortion @ Rated Audio	3% typical		
Hum and Noise	-45 dB	-40 dB 12.5 kHz -45 dB 25 kHz	
Audio Response	TIA603 & ETS300 & CEPT 84 Annex 2		
Conducted Spurious Emission	-57 dBm < 1 GHz -47 dBm > 1 GHz		

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

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

For more information, please contact



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All specifications are subject to change without notice.

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Rev. 1-10/04

MD-CDM1250-01C