

# CDM1250<sup>™</sup>

Available in Low Band, VHF and UHF Operates on Conventional Systems

#### Features include:

- 64 Channels
- Dual Priority Scan
  Frequently scans higher priority channels
- Repeater Talkaround
   Unit-to-unit communication, bypassing repeater
- Data Capable
- Quik-Call II<sup>™</sup> and MDC 1200 Signaling (Encode/Decode) Send and receive information via tone or digital signals Features Include:

Caller ID: Identifies incoming callers

Selective Call: Let's you call a specific group or individual Call Alert: Notifies users that you're trying to reach them

- DTMF Encode Sends and receives pages and telephone calls
- Status Message: Exchanges text messages between base and user

- X-Pand<sup>™</sup> Audio Enhancement Crisp, clear audio quality
- Emergency Signaling Sends discreet help signal
- Horn and Lights Activation
   Notifies user of call alerts/selective calls when away from vehicle
- Optional Voice Storage Records important messages or memos
- Multi-Language Capabilities
   Programming in English, Spanish, French, or Portuguese
- RSSI Indicator
  Displays signal strength level
- Remote Mountable Control Head



## The Versatile Radio—more accessible than you think

Perfect for growing organizations, the flexible CDM1250 two-way mobile can readily expand to meet rapidly changing business needs. Motorola's flexible X-Pand™ audio feature and a powerful front-projecting speaker ensure superb sound clarity, even in noisy environments, making it an ideal choice for public administration and mining applications. The large 14-character alphanumeric display with user-friendly icons helps make information readily available and 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 keep productivity at it's highest, no matter how fast your business grows.

### **SPECIFICATION SHEET**

		Low Band	VHF	UHF
Channel Capacity:		64	64	64
Typical RF Output:	Low Power High Power	40-60W	1-25W 25-45W	1-25W 25-40W
Frequencies:		29.7-36 MHz, 36-42 MHz 42-50 MHz	136-174 MHz	403-470 MHz 450-512 MHz
Dimensions: (H x W x D)	Low Power (1-25) High Power	N) 2.39 x 7.05 x 9.84 inch 61 x 179 x 250 mm	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 59 x 179 x 186 mm 2.34 x 7.05 x 7.8 inch 59 x 179 x 198 mm
Weight:	Low Power (1-25) High Power	N) 4.5 lbs (2.04 Kg)	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: Rx @ rated, external 8 ohr	Standby m speaker	.4A 1.5A	.3A 1.5A	.3A 1.5A
Transmit:		17A	7A @ 25W, 13.5 A @ 45W	8A @ 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		
Channel Spacing:		12.5/20/30 kHz	12.5/20/25 kHz*	12.5/20/25 kHz*		
Frequency Stability: (-3	80° to +60° C, +25° R	ef.) ± 5 ppm	± 2.5 ppm	± 2.5 ppm, ± 1.5 ppm UHF B2 HP		
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*	± 2.5 @ 12.5 kHz, ± 4.0 @ 20 kHz ± 5.0 @ 25 kHz*		
FM Hum and Noise:		-45dB	-40dB @ 12.5 kHz -45dB @ 25 kHz*	-40dB @ 12.5 kHz -45dB @ 25 kHz*		
Conducted/Radiated E	mission:	-26dBm < 1 GHz -26dBm > 1 GHz	-36dBm < 1 GHz -30dBm > 1 GHz	-36dBm < 1 GHz -30dBm > 1 GHz		
Adjacent Channel Pow	er:	-70dB	-60dB @ 12.5 kHz, -70dB @ 25 kHz*	-60dB @ 12.5 kHz, -70dB @ 25 kHz*		
Audio Response:		TIA 603 and ETS300 and CEPT 84 Annex 2	TIA 603 and ETS300 and CEPT 84 Annex 2	ETS300 and CEPT 84 Annex 2		
Audio Distortion:		3% Typical	3% Typical	3% Typical		
FM Modulation:		16K0F3E (25 kHz)	16K0F3E (25 kHz)*, 11K0F3 (12.5 kHz)	16K0F3E (25 kHz)*, 11K0F3 (12.5 kHz		

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:	12.5/20/30 kHz	12.5/20/25 kHz*	12.5/20/25 kHz*		
Sensitivity: (12dB SINAD)	0.3 μV (0.25 Typical)	0.3 μV (0.23 Typical)	0.3 μV (0.23 Typical)		
Intermodulation:	78dB 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 with 4 ohm speaker	3W Internal, 13W External	3W Internal, 13W External	3W Internal, 13W External		
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 and ETS300 and CEPT 84 Annex 2	TIA603 and ETS300 and CEPT 84 Annex 2	TIA603 and ETS300 and 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		

<sup>\*</sup>Availability of new 25 kHz equipment may be restricted due to Narrowbanding regulations in your country. Please check with your frequency coordinator and/or regulatory agency for the latest information on Narrowbanding.

PORTABLE MILITARY STANDARDS						
Applicable MIL-STD	810C	810D	810E			
	Method/Procedure	Method/Procedure	Method/Procedure			
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	506.3/2			
Humidity:	507.1/2	507.2/2, 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			

## ENVIRONMENTAL

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

