



**MOTOROLA**

TWO-WAY RADIOS

# GM1280: The Sophisticated Radio

The GM1280 is for professionals who need to communicate using the highest levels of MPT radio sophistication. A sophisticated communication tool with a user friendly interface, the GM1280 helps to improve the efficiency and productivity of your mobile workforce.



As Dedicated As You Are

Professional Radio

## A wide array of features include:

- **Signalling**  
*The fully compliant MPT signalling package includes MPT1343, Regionet 43 and ANN modes of operation. Radios are configurable for up to 60 personalities including Talkgroup Select and Conventional signalling.*
- **Data Messaging and MAP27 Board**  
*Includes a built-in pager with the capability of receiving data messages. You can send data messages from the contact list or manually entered alphanumeric text from the keypad. By using the optional MAP27 board, the radio can communicate with external data devices.*
- **Voice Storage**  
*- Voice Recorder: a paperless notepad allowing you to store and retrieve messages.  
- Voice Message: a voice prompt for callers to leave a message to be stored in the radio.*
- **User Information**  
*The large 4-line alphanumeric display contains icons for programmed features and operational awareness. This mobile radio provides separate distinctive tones plus name decode for many incoming calls. Alert and feedback tones can be setup in a variety of volume levels and sounds.*
- **Ease of Use**  
*Simple menu driven user interface including a full alphanumeric keypad make the full power of GM1280 simple and intuitive to use.*
- **Dynamic Regrouping**  
*Provides over-the-air reconfiguration of the radio plus download of group identity in a meaningful alphanumeric form.*
- **DTMF**  
*Provided that your radio has access to a phone system you can make phone calls from your radio. Alternatively you can use DTMF tones in a number of ways, for example to steer an answering machine.*
- **External Alarm**  
*Activates the vehicle horn and/or lights on receipt of an incoming call, so you won't miss a call even when away from your vehicle.*
- **Car Radio Mute**  
*Automatically mutes your in-car audio entertainment system to allow calls to be heard and sent without interference.*

## Additional features include:

- Contact List
- X-Pand™ Voice Compression and Low Level Expansion
- Wideband and Programmable Channel Spacing
- Missed Call Alerts
- Option Board Expandability\*

\*Please check with your dealer for availability on specific option boards.

# GM1280 Mobile Two-Way Radio Specifications

General		
Specification	VHF	UHF
Frequency Range:	136-174 MHz	403-470 MHz
Frequency Stability (-30°C to +60°C, 25°C Ref.)	±2.5 PPM	±2 PPM
Channel Spacing:	12.5/20/25 kHz	
Power Output:	1-25W	
Power Supply:	13.2Vdc (10.8 - 15.6 Vdc) negative vehicle ground	
Dimensions (L x W x H)	188mm x 185mm x 72mm (add 7mm for Volume Knob) (7.4" x 7.28" x 2.83" - add 0.27" for Volume Knob)	
Weight:	1400 g (3.15 lbs)	
Operating Temperature	-30 to 60°C	
Sealing	Passes rain testing to IP54	
Shock and Vibration	Meets MIL-STD 810-C,D&E and TIA/EIA 603	
Dust	Meets MIL-STD 810-C,D&E and TIA/EIA 603	
Humidity	Meets MIL-STD 810-C,D&E and TIA/EIA 603	

Transmitter	
Specification	VHF/UHF
Modulation Limiting:	±2.5 kHz @ 12.5 kHz ±4.0 kHz @ 20 kHz ±5.0 kHz @ 25 kHz
FM Hum and Noise:	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted/Radiated Emissions:	-36 dBm < 1 GHz -30 dBm > 1 GHz
Adjacent Channel Power	-60 dB @ 12.5, -70 dB @ 25 kHz
Audio Response: (300 to 3000Hz)	+1, -3dB
Audio Distortion: @ 1000 Hz, 60% Rated Maximum Deviation:	3% Typical

Mobile 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
Temp. 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	1,2,5	516.3	1	516.4	1

Receiver		
Specification	VHF	UHF
Sensitivity (12dB SINAD): (ETS)	0.30µV (0.22 µV Typical)	
Intermodulation: (ETS)	>65 dB, >70 dB in Base Mode	
Adjacent Channel Selectivity: (ETS)	80dB @ 25 kHz 75dB @ 20 kHz 65dB @ 12.5 kHz	75 dB @ 25 kHz 70 dB @ 20 kHz 65 dB @ 12.5 kHz
Spurious Rejection: (ETS)	80 dB @ 20/25 kHz 75 dB @ 12.5 kHz	75 dB @ 20/25 kHz 70 dB @ 12.5 kHz
Rated Audio: (ETS)	7.5W & 13W External	
Audio Distortion @ Rated Audio:	3% Typical	
Hum and Noise:	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz	
Audio Response: (300 to 3000Hz)	+1, -3dB	
Conducted Spurious Emission per FCC Part 15:	-57 dBm <1 GHz -47 dBm >1 GHz	

\*Availability subject to individual country's law and regulations.

Specifications are subject to change without notice and are issued for guidance purposes only.

All specifications listed are typical. Radios meet applicable regulatory requirements.

Conforms to EC directive 89/336/EEC

Complies with ETS 300 113

Contact your local Authorised Motorola Dealer to find out more about how communicating with the Professional Radio series will benefit your organisation.



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For exceptional performance, reliability and quality, Motorola Original accessories are the only options. For full details, please refer to the Professional Radio Series Accessories brochure.



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