

# GM160

Efficiency Through Communication.

## SPECIFICATION SHEET



### KEY FEATURES

#### Signalling

- Private Line™
- Conventional / MDC

#### Easy to use and set-up

- Intuitive menu-driven user interface and large controls enable easy access to many features
- 14 character alpha-numeric display
- Programmable buttons
- Ruggedised design and compelling user interface
- PC programmable\*

#### Adaptable and versatile

- Option board capability allows additional features and customer-specific functions\*
- Easily programmed in the field to support additional features
- Data capability allows interface to third party terminals to enhance communications

#### Protecting users

- Emergency call
- PTT ID
- Time-out timer

#### Quality

- MIL Spec 810 compliant
- Meets IP54 environmental standards
- Passed Motorola Accelerated Life Test
- X-Pand™ voice compression technology

#### Efficiency

- Channel scanning
- Talkaround
- Status messaging
- Address book
- Escalating incoming call alert

#### Included as standard

- Battery power cable
- Enhanced compact microphone
- Low profile trunnion kit

#### Accessory options

A wide range of accessory options are available to customise your radio

- Microphones and desktop solutions
- In-vehicle accessories
- Mounting kits

*\* For further information, please contact your local dealer or distributor*



The GM160, one of the market-leading radios in Motorola's Professional Series, offers communications to the mobile workforce in demanding organisations. A comprehensive feature set ensures business efficiency; all made easy through intuitive menu-driven user interface and the large display.

Option boards and a wide range of accessories and portable radios are also available within the Professional Series. It is easy to build a tailored communications solution to meet your needs.

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 Capacity	128	
Channel Spacing	12.5/20/25 kHz	
Power Output	1-25W	25-45W
Power Supply	13.2Vdc (10.8 - 15.6 Vdc) negative vehicle ground	
Dimensions (L x W x H)	1-25W: 186 x 180 x 59mm (add 9mm for Volume knob) 25-45W: 198 x 180 x 59mm (add 9mm for Volume knob)	
Weight	1-25W: 1450g 25-45W: 1530g	
Operating Temperature	-30 to 60°C	
Operation Mode	Intermittent	Intermittent
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 kHz -70 dB @ 20/25 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

Data for +25°C unless otherwise specified

RECEIVER		
Specification	VHF	UHF
Sensitivity (12dB SINAD) (EN)	0.30µV (0.22 µV Typical)	
Intermodulation (EN)	>65 dB	
Adjacent Channel Selectivity (EN)	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 (EN)	80 dB @ 20/25 kHz 75 dB @ 12.5 kHz	75 dB @ 20/25 kHz 70 dB @ 12.5 kHz
Rated Audio (EN)	3W Internal 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 only.  
All specifications listed are typical. Radios meet applicable regulatory requirements.  
Conforms to EC directive EN 300 086 and EN 300 113  
Contact your local Motorola Authorised Dealer to find out more about how communicating with the Professional Series radios will benefit your organisation.



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