

MOTOROLA
GM3688
CONVENTIONAL
MOBILE



Cost-Effective and Customisable Productivity Tool

Take the ruggedly-built Motorola GM3688 for a ride into the tough worlds of the Construction, Taxi, Courier and Manufacturing industries and watch it perform. Superb audio quality makes communication a breeze even in high-noise environments.

Now with an alphanumeric display and PTT ID function, callers from any of the 64 supported channels can be identified. Advanced capabilities for enhanced fleet management can be added on quickly and easily via the 16-pin external accessory port or an option board interface. In addition, a comprehensive range of accessories can be customised to suit individual users' needs, even within the same fleet. The GM3688 Conventional Mobile – made to grow with your fleets.



Features

Rugged Construction

The mobiles are built to meet or exceed the stringent Motorola ALT, MIL-STD 810C/D/E and IP54 international standards, which make them suitable for use in rough environments.

Audio Enhancement

The mobiles offer voice compression mode and powerful 4W front-firing speakers for maximal audio clarity. Optional 13w external speakers are available for high-noise environments like the construction and manufacturing industries.

64 Channels

Able to accommodate your growing business needs and communication channels.

8-character Alphanumeric Display

Large display with icons, for quick identification of radio status, and incoming calls.

16-pin External Accessory Port/Option Board Interface

Allows easy expansion of radio's capability, without messy dismantling and rewiring.

Devices such as GPS module, data modem and a host of others can be added on as your business needs grow.

User Friendly

- Large ON/OFF Knob and Channel Buttons enable easy and quick operation.
- 4 Programmable Buttons provide convenient access to frequently used functions.
- LED Status Indicators and Alert Tones allow clear indication of radio's operating status and timely notification of incoming calls.

Voice Operated Transmission (VOX)

Radio may be activated by voice control when connected to a Visor microphone, thus allowing users to concentrate on road safety.

Signalling Capabilities

MDC1200

PTT ID Encode/Decode

Identifies the radio during transmission, so callers do not have to verbally identify themselves.

Selective Radio Inhibit Decode

If missing or stolen, the dispatcher or system can remotely disable the radio for greater security.

Radio Check Decode

Allow radios to be checked if it is working or operating within range.

Emergency

Provides instant help by activating the foot switch.

DTMF

- PTT ID Encode
- Selective Call Encode
- Call Alert Encode

Quick Call II

- Selective Call Encode/Decode
- Call Alert Encode/Decode

Additional Features

- Programmable Channel Spacing
- Busy Channel Lockout
- External Alarm
- Public Address Mode
- Repeater / Talkaround
- Dual Priority Scan
- Nuisance Channel Delete
- Tight / Normal Squelch
- Time Out Timer

Industrial Applications

The GM3688 can be used as a Radio Frequency (RF) pipe for integrated solutions such as Automatic Vehicle Locator Systems (AVL) and Telemetry. A host of devices can be connected via the mobile's 16-pin external port, to offer a multitude of solutions.

Automatic Vehicle Locator Systems (AVL)

Allows remote tracking of your vehicle's location using the Global Positioning System (GPS) and integrated software. This ensures a more efficient utilisation of the fleet, dynamic planning of delivery routes and estimation of arrival time, thereby resulting in better customer service and profitability. The AVL system can also be used to track vehicles carrying precious cargo and company personnel in high-risk environments.

Telemetry

Enables remote real-time monitoring of environmental conditions or equipment parameters. Together with integrated hardware and software solutions, the mobiles can be used for remote monitoring of water levels in inaccessible areas, or to track key operational / process parameters to ensure the safety of plant workers.

Enhance Your Radio's Capabilities

A comprehensive range of accessories is also available so that the radios can be customised to suit your needs. Adding the proper handset, speakers, microphone & mounting accessories can enhance your productivity. Motorola accessories are built with the highest quality standards and are specially engineered to assure maximum performance of your radio.

Accessories for GM3688

Microphone

HMN3596 Compact Palm Microphone
HMN1035 Heavy Duty Palm Microphone
RMN5029 Enhanced Keypad Microphone
AAREX4617 Telephone Style Handset



Hands-free Solution

GMMN4065 Visor Mounted Microphone (requires use of the remote PTT configuration below)
RLN4857 Pushbutton with Remote PTT
RLN4856 Remote Footswitch PTT



Desktop Solution

HMN3000 Desktop Microphone
HSN8145 7.5 W External Speaker
RSN4001 13 W External Speaker
HPN4002 Desktop Power Supply



GM3688 Specifications*

General Specifications				
	VHF		UHF	
Frequency	136-162MHz 146-174MHz	403-440MHz 438-470MHz 465-495MHz	490-527MHz	350-380MHz
Channel Capacity	64			
Power Output	1-25W 25-45W	1-25W 25-40W	25W 25-40W	1-25W
Power Supply	13.8 Vdc (11 Vdc - 16.8 Vdc) negative vehicle ground			
Channel Spacing	12.5/20/25KHz			
Frequency Stability (-30°C, +60°C, +25°C Ref)	+/-2.5ppm			
Dimensions (H * W * L)	44mm x 169mm x 118mm			
Weight	1.01 Kg			
Operating temperature	-30 to +60°C			
Sealing	Passes rain and dust testing to IP54			
Shock and Vibration	Meets MIL-STD 810-C, D&E and TIA/EIA 603			

Receiver

	VHF	UHF	
Sensitivity (12db Sinad)		0.35uV (12.5KHz) 0.3uV (25KHz)	
Intermodulation	65dB (12.5KHz) 75dB (25KHz)	60dB (12.5KHz) 70dB (25KHz)	
Adjacent Channel Selectivity	65dB (12.5KHz) 75dB (25KHz)	60dB (12.5KHz) 70dB (25KHz)	
Spurious Rejection	75dB	70dB	
Rated Audio (extended audio with 4 ohm speaker)	4W internal 13W external		
Audio Distortion @ Rated Audio	3% typical		
Hum and Noise	-40 dB (12.5KHz) -45 dB (25KHz)	-35 dB (12.5KHz) -40 dB (25KHz)	-40 dB (12.5KHz) -40 dB (25KHz)
Audio Response (300 to 3000Hz)	+1, -3dB		
Conducted Spurious Emission	-57 dBm < 1GHz -47dBm > 1GHz		

Transmitter

	VHF	UHF	
Modulation Limiting		+/-2.5KHz (12.5KHz) +/-4KHz (20KHz) +/-5KHz (25KHz)	
FM Hum & Noise	-40 dB (12.5KHz) -45 dB (25KHz)	-35 dB (12.5KHz) -40 dB (25KHz)	-40 dB (12.5KHz) -40 dB (25KHz)
Conducted / Radiated Power	-36 dBm < 1GHz -30 dBm > 1GHz		
Adjacent Channel Power	-60 dB (12.5KHz) -70 dB (25KHz)		
Audio Response (300 to 3000Hz)	+1, -3dB		
Audio Distortion @ 1000Hz, 60% Rated Max. Deviation	3% typical		

* Availability subject to country's law and regulations. Specifications subject to change without notice. All specifications shown are typical. Radios meet applicable regulatory requirements.

 Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EIA RS-3168 in Shock, Vibration, Dust, Humidity, IP54 for Sealing.

 Stamp of approval from the U.S. Military for use in rough environments.

 Compliance with ISO 9001 Standard - on international quality system assurance on design, development, production, installation and servicing of a product.



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