GM3689: CUSTOMISABLE AND COST-EFFECTIVE PRODUCTIVITY TOOL

The GM3689 is a functional communications solution and also adaptable to growing business needs. Each unit can be customised to suit individual users' needs, even within the same fleet. The wide range of capabilities makes this mobile great value for money.

100 Channels

Able to accommodate your growing business needs and communication channels.

3 Programmable Buttons

Allows access to frequently-used functions, such as Scan, Repeater Talkaround, Transmitting Power Level, Emergency and others.



8-character Alphanumeric Display

Displays icons for quick identification of radio status, and identifies incoming callers.

Option Board Expandability

Additional capabilities such as data transfer and voice storage can be added easily.

Contact List

Up to 255 names, numbers and caller IDs can be called up quickly and conveniently.



IDEAL FOR:

Industrial Applications

The GM3189 and GM3689 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.



In today's fast-moving workplace, efficient communications solutions are vital to your competitiveness. A misunderstood message may have big consequences. That is why 75 years of pushing the frontiers in radio technology makes Motorola the brand of choice when you need reliable, clear communication.

The GM3189 and GM3689 two-way radios comfortably meet the level of reliability and clarity needed for industries like Taxis and Courier services. The rugged build quality, characteristic to all Motorola mobiles, means they are apt for Construction and Manufacturing activities too.

Advanced features such as PTT-ID, Emergency and Lone Worker capabilities are possible with these Select V mobiles. Furthermore, your investment is protected, as the GM3189 and GM3689 are compatible with the existing range of accessories.



GM3189: SFFORDABLE AND EFFICIENT COMMUNICATION SOLUTION

The GM3189 offers ease of use and is an essential appliance for businesses on the move.

10 Channels

Increases user efficiency by allowing them to address different groups of users.

2 Programmable Buttons

Provides access to frequently-used functions such as Scan, Monitor and Transmitting Power Level.

One-character Channel Display

Display of the current communication channel at a glance.



COMMON FEATURES OF GM3189 AND GM3689

Signalling Standard

Both mobiles support the following Select V signalling standards, and programming of up to two 'user-defined' signalling standards is possible.

- ZVEI
- Modified ZVEI
- · French Modified ZVEI
- 20ms CCIR
- 70 ms CCIR
- 100 ms CCIR
- EEA

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 frontfiring speakers for maximal audio clarity. Optional 13W external speakers are available for high-noise environments like the construction and manufacturing industries.

User Friendly

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

16-pin External Accessory Port

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.

PTT - ID

Identifies the radio during transmission. This saves the need of verbal identification, making communication more efficient.

Lone Worker

Provides added safety to users who work alone. The radio enters into Emergency mode if the user fails to respond to a warning signal after a stipulated time.

Stun/Unstun

Prevents abuse of the radio network. The central dispatcher can disable unauthorised or nuisance users over the air.

Emergency

Activates the emergency mode via the footswitch, allowing the driver to notify the central operator quickly and discreetly in an emergency situation.

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.

OTHER FEATURES

- Selective Call
- Car Audio Mute
- Scan
- Nuisance Channel Delete
- Call Forward
- · Repeater/Talkaround
- External Alarm
- · High/Low Power
- · Local/Distant
- · Public Address Mode
- · Programmable Channel Spacing

TECHNICAL SPECIFICATION

Frequency	General Specifications	MB	VHF	UHF		
A65-495MHz 490-527MH		66-88MHz	136-162MHz	403-440MHz		
Channel Capacity			146-174MHz	438-470MHz		
Power Supply				465-495MHz	490-527MHz	
Description 13.8 Vdc (11 Vdc - 16.6 Vdc) negative vehicle ground 12.5/20/25KHz	Channel Capacity					
Channel Spacing 12.6/20/25KHz 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 +600C Sealing Passes rain and dust testing to IP54 Shock and Vibration Meets MIL-STD 810-C, D&E and TIA/EIA 603 Receiver MB VHF UHF Sensitivity (12db Sinad) 0.35uV (12.5KHz) 65dB (12.5KHz) Intermodulation 60dB (12.5KHz) 65dB (12.5KHz) 60dB (12.5KHz) 70dB (25KHz) 75dB (25KHz) 70dB (25KHz) 60dB (12.5KHz) Adjacent Channel Selectivity 60dB (12.5KHz) 75dB (25KHz) 60dB (12.5KHz) 60dB (12.5KHz) 70dB (25KHz) 75dB (25KHz) 75dB (25KHz) 70dB (25KHz) 60dB (12.5KHz) Post (25KHz) 75dB (25KHz) 75dB (25KHz) 60dB (12.5KHz) 60dB (12.5KHz) Adjacent Channel Selectivity 70dB (25KHz) 75dB (25KHz) 70dB (25KHz) 70dB (25KHz) Audio Distortion @ Rated Audio with 4 ohm speaker) 40dB (12.5KHz) 40dB (12.5KHz)	Power Output		1-25W	25W		
Channel Spacing 12.6/20/25KHz 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 +600C Sealing Passes rain and dust testing to IP54 Shock and Vibration Meets MIL-STD 810-C, D&E and TIA/EIA 603 Receiver MB VHF UHF Sensitivity (12db Sinad) 0.35uV (12.5KHz) 65dB (12.5KHz) Intermodulation 60dB (12.5KHz) 65dB (12.5KHz) 60dB (12.5KHz) 70dB (25KHz) 75dB (25KHz) 70dB (25KHz) 60dB (12.5KHz) Adjacent Channel Selectivity 60dB (12.5KHz) 75dB (25KHz) 60dB (12.5KHz) 60dB (12.5KHz) 70dB (25KHz) 75dB (25KHz) 75dB (25KHz) 70dB (25KHz) 60dB (12.5KHz) Post (25KHz) 75dB (25KHz) 75dB (25KHz) 60dB (12.5KHz) 60dB (12.5KHz) Adjacent Channel Selectivity 70dB (25KHz) 75dB (25KHz) 70dB (25KHz) 70dB (25KHz) Audio Distortion @ Rated Audio with 4 ohm speaker) 40dB (12.5KHz) 40dB (12.5KHz)	Power Supply					
Dimensions (H * W * L)	Channel Spacing					
Dimensions (H * W * L)	Frequency Stability (-30°C, +60°C, +25°C Ref)	+/-2.5ppm				
Meight		44mm x 169mm x 118mm				
Passes rain and dust testing to IP54						
Shock and Vibration Meets MIL-STD 810-C, D&E and TIA/EIA 603 Receiver MB VHF UHF Sensitivity (12db Sinad) 0.35uV (12.5KHz) 0.3uV (25KHz) 0.3uV (25KHz) Intermodulation 70dB (25KHz) 60dB (12.5KHz) 75dB (25KHz) 65dB (12.5KHz) 70dB (25KHz) 60dB (12.5KHz) 70dB (25KHz) Adjacent Channel Selectivity 70dB (25KHz) 60dB (12.5KHz) 75dB (25KHz) 65dB (12.5KHz) 70dB (25KHz) 60dB (12.5KHz) 70dB (25KHz) Spurious Rejection Rated Audio (extended audio with 4 ohm speaker) 4W internal 13W external 70dB Audio Distortion @ Rated Audio Hum and Noise -45dB (25KHz) -40dB (12.5KHz) -45dB (25KHz) -35dB (12.5KHz) -35dB (12.5KHz) Audio Response (300 to 3000Hz) 41, 3dB -47dBm > 1GHz -35dB (12.5KHz) -47dBm > 1GHz Transmitter MB VHF UHF Modulation Limiting +1/-5KHz (25KHz) +1/-5KHz (25KHz) +1/-5KHz (25KHz) +1/-5KHz (25KHz) -35dB (12.5KHz) -35dB (12.5KHz) -45dB (25KHz) -35dB (12.5KHz) -35dB (12.	Operating temperature					
Shock and Vibration Meets MIL-STD 810-C, D&E and TIA/EIA 603 Receiver MB VHF UHF Sensitivity (12db Sinad) 0.35uV (12.5KHz) 0.3uV (25KHz) 0.3uV (25KHz) Intermodulation 70dB (25KHz) 60dB (12.5KHz) 75dB (25KHz) 65dB (12.5KHz) 70dB (25KHz) 60dB (12.5KHz) 70dB (25KHz) Adjacent Channel Selectivity 70dB (25KHz) 60dB (12.5KHz) 75dB (25KHz) 65dB (12.5KHz) 70dB (25KHz) 60dB (12.5KHz) 70dB (25KHz) Spurious Rejection Rated Audio (extended audio with 4 ohm speaker) 4W internal 13W external 70dB Audio Distortion @ Rated Audio Hum and Noise -45dB (25KHz) -40dB (12.5KHz) -45dB (25KHz) -35dB (12.5KHz) -35dB (12.5KHz) Audio Response (300 to 3000Hz) 41, 3dB -47dBm > 1GHz -35dB (12.5KHz) -47dBm > 1GHz Transmitter MB VHF UHF Modulation Limiting +1/-5KHz (25KHz) +1/-5KHz (25KHz) +1/-5KHz (25KHz) +1/-5KHz (25KHz) -35dB (12.5KHz) -35dB (12.5KHz) -45dB (25KHz) -35dB (12.5KHz) -35dB (12.						
MB						
Sensitivity (12db Sinad)						
Intermodulation	Receiver	MB	VHF	UHF		
Intermodulation	Sensitivity (12db Sinad)		0.35uV (12.5KHz)			
Intermodulation	,		0.3uV (25KHz)			
70dB (25KHz) 75dB (25KHz) 70dB (25KHz) 60dB (12.5KHz) 70dB (25KHz) 60dB (12.5KHz) 60dB (12.5KHz)<	Intermodulation	60dB (12.5KHz)	65dB (12.5KHz)	60dB (12.5KHz)		
Adjacent Channel Selectivity 70dB (25KHz) 75dB 75dB 75dB 75dB 75dB 75dB 75dB 75dB 75dB	70dB (25KHz)	75dB (25KHz)	70dB (25KHz)	,	,	
70dB (25KHz) 75dB (25KHz) 70dB (25KHz) Spurious Rejection 70dB 75dB 70dB Rated Audio (extended audio with 4 ohm speaker) 4W internal 13W external Audio Distortion @ Rated Audio 3% typical Hum and Noise -40dB (12.5KHz) -40dB (12.5KHz) -35dB (12.5KHz) -45dB (25KHz) -40dB (25KHz) -40dB (25KHz) -35dB (12.5KHz) Audio Response (300 to 3000Hz) +1, -3dB -57dBm < 1GHz		60dB (12.5KHz)		60dB (12.5KHz)		
Spurious Rejection 70dB 75dB 70dB Rated Audio (extended audio with 4 ohm speaker) 4W internal 13W external					,	
Audio Distortion @ Rated Audio 3% typical			` '	70dB		
Audio Distortion @ Rated Audio 3% typical Hum and Noise -40dB (12.5KHz) -40dB (12.5KHz) -45dB (25KHz) -40dB (25KHz) -40dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB Conducted Spurious Emission -57dBm < 1GHz	Rated Audio (extended audio with 4 ohm speaker)					
Audio Distortion @ Rated Audio 3% typical Hum and Noise -40dB (12.5KHz) -40dB (12.5KHz) -45dB (25KHz) -40dB (25KHz) -40dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB Conducted Spurious Emission -57dBm < 1GHz	, , , , , , , , , , , , , , , , , , , ,					
Hum and Noise	Audio Distortion @ Rated Audio		3% typical			
-45dB (25KHz) -40dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB Conducted Spurious Emission -57dBm < 1GHz -47dBm > 1GHz Transmitter MB VHF UHF Modulation Limiting +/- 2.5KHz (12.5KHz) +/-4KHz (20KHz) +/-4KHz (20KHz) +/-4KHz (20KHz) +/-5KHz (25KHz) -35dB (12.5KHz) FM Hum & Noise -40dB (12.5KHz) -40dB (12.5KHz) -40dB (25KHz) -35dB (12.5KHz) -3dB (25KHz) Conducted / Radiated Power -36dBm < 1GHz -30dBm > 1GHz -	Hum and Noise	-40dB (12.5KHz)		-35dB (12.5KHz)		
Audio Response (300 to 3000Hz)	-45dB (25KHz)	` '	, ,	` '		
-57dBm < 1GHz			· · · · · ·			
-47dBm > 1GHz			,			
Transmitter MB VHF UHF Modulation Limiting +/- 2.5KHz (12.5KHz) (12.5KHz) (12.5KHz) (12.5KHz) (12.5KHz) (12.5KHz) (12.5KHz) (12.5KHz) +/- 4KHz (20KHz) (12.5KHz) (
Modulation Limiting						
Modulation Limiting	Transmitter	MB	VHF	UHF		
+/-4KHz (20KHz) +/-5KHz (25KHz) FM Hum & Noise -40dB (12.5KHz) -45dB (25KHz) -45dB (25KHz) Conducted / Radiated Power -36dBm < 1GHz -30dBm > 1GHz -40dB (12.5KHz) -40dB (25KHz) -30dBm > 1GHz -40dB (25KHz) -40dB (25KHz) -40d			+/- 2.5KHz (12.5KHz)			
#-/-5KHz (25KHz) FM Hum & Noise -40dB (12.5KHz) -40dB (25KHz) -40dB (25KHz) -40dB (25KHz) -40dB (25KHz) -35dB (12.5KHz) -35dB (12.5KHz) -36dBm < 1GHz -30dBm > 1GHz -30dBm > 1GHz -60dB (12.5KHz) -70dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB	3		, ,			
FM Hum & Noise -40dB (12.5KHz) -40dB (12.5KHz) -35dB (12.5KHz) -45dB (25KHz) -40dB (25KHz) -40dB (25KHz) -40dB (25KHz) -36dBm < 1GHz -30dBm > 1GHz -30dBm > 1GHz -60dB (12.5KHz) -70dB (25KHz) -70dB (25KHz) -40dB (, ,			
-45dB (25KHz) -40dB (25KHz) Conducted / Radiated Power -36dBm < 1GHz	FM Hum & Noise	-40dB (12.5KHz)		-35dB (12.5	KHz)	
Conducted / Radiated Power -36dBm < 1GHz		, ,	` ,		-,	
-30dBm > 1GHz Adjacent Channel Power -60dB (12.5KHz) -70dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB		-36dBm < 1GHz				
Adjacent Channel Power -60dB (12.5KHz) -70dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB	22222					
-70dB (25KHz) Audio Response (300 to 3000Hz) +1, -3dB	Adjacent Channel Power					
Audio Response (300 to 3000Hz) +1, -3dB			` ,			
	Audio Response (300 to 3000Hz)					
	Audio Distortion @ 1000Hz, 60% Rated Max. Deviati		3% typical			

ENHANCE YOUR RADIO'S CAPABILITIES

A comprehensive range of accessories is also available so that the radios can be customized 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 GP3189 & GM3689 Select V



HMN1035 -Heavy-duty Palm Microphone HMN3596 Compact Palm Microphone



Enhanced Keypad Microphone AAREX4617 Telephone Style Handset



GMMN4065 -Visor Mounted Microphone (requires use of the remote PTT configuration below)



RLN4857 -Pushbutton with Remote PTT



Emergency Footswitch PTT RLN4856 -Remote Footswitch PTT

RLN4836 -



HMN3000 -Desktop Microphone



RSN4001 -13 W External speaker HSN8145 -7.5 W External speaker





Motorola Electronics Pte Ltd MIC Level 7, 12 Ang Mo Kio Street 64 Ang Mo Kio Industrial Park 3, Singapore 569088 www.motorola.com/governmentandenterprise











Availability subject to country's laws and regulations. Radios meet applicable regulatory requirements. All specifications subject to change without notice. Specifications are not representative of all radios and may vary in different radios.