

GP338 PORTABLE RADIO - A VERSATILE RADIO

KEY FEATURES AND BENEFITS

X-PAND™ Audio Technology:

Motorola's special voice compression and expansion technology called X-PAND™ enables crisper, clearer and stronger audio quality, allowing you to keep communicating, even in any noisy environment.

128 Channels

Maximum of 128 channels to organise work groups with ease and efficiency.

14-Character Alpha Numeric Dot Matrix Display:

Clear and easy to read text display.

Battery Strength Indicator:

Easy-to-read on-screen LCD display indicator alerting user on battery strength.

Name & Tone Tagging:

Capability to assign up to 8 unique ring tones to different users/talkgroups, and the visual caller ID display makes caller identification possible.

Received Signal Strength Indicator:

A very user-friendly feature to display radio signal strength in the vicinity where you operate in.

Clock and Reminder Alarm:

Set time stamp on incoming recorded messages; Or, set the alarm to remind user of important appointments.

Emergency Siren:

Easy-to-access, one-touch button with piercing alarm to seek help in critical situations.

6 Programmable Buttons

Quick and easy access to most frequently used features.

Adjustable RF Power Levels

Optimised coverage and conserve battery consumption.

Internal Voice Operated Transmissions (VOX)

For hands-free operation, activate this option by speaking with the optional headsets.

Repeater/Talkaround

Freedom to communicate via a repeater for wide area coverage; or bypass a repeater and talk directly to another unit for easy local unit-to-unit communications.

Field Retrofit Option Boards:

Easy to install, affordable add-on functionality whenever your needs arise. Option Boards are available for:

- DTMF Decode for in-coming calls capability.
- II) Voice Storage for recording and playing back voice messages.
- III) Mandown Alert for triggering an emergency procedure when the radio is horizontal or still for a pre-defined time. Ideal for radio users who work alone or in isolated environments.



Flexible with Good Audio Quality

Performs Under Any Condition:

The GP338 is essential for growing organisations because of its unique versatility. When necessary, the radio can easily be programmed in the field to add or delete features. So, whether it's the harsh environment of a construction site or the posh elegance of an exclusive hotel, the radio of choice is the GP338. It's the radio that grows with you.

Ideal when you need:

- To communicate frequently with multiple work groups.
- A rugged radio to perform under harsh outdoor condition.
- To communicate in a high-noise environment.
- To coordinate law enforcement and emergency.
- Constant up-to-the-minute information.

The Power Tool for Contact & C

Enhance Your Radio's Capabilities

A comprehensive range of accessories is available so that the radios can be customised to suit your needs. Adding the proper headsets, microphones, batteries, chargers or carry cases can enhance the productivity of the people who use two-way radios. Motorola accessories are built with the highest quality standards and are specially engineered to assure maximum performance of your radio, no matter what profession you're in.



Light Weight Head Set AZRMN4018



NiMH Battery & Belt Clip



Nylon Carry Case



Multi-unit Charger



impres™ Smart Energy System



Remote Speaker Microphone PMMN4002

ENHANCED SIGNALLING FEATURES:

The GP338 two-way radio supports these three signalling protocols:

I) MDC1200 Signalling

- PTT-ID (Encode/Decode)
 Identify your outgoing calls and incoming callers
- Voice Selective Call (Encode/Decode)
 Send and receive a call from a specific group or individual
- Selective Radio Inhibit (Decode)
 - Allows system owner to disable stolen or missing radios
- Status/Messages (Encode)
 - Pre-defined text messages can be assigned to enable users to send frequently used messages and statuses quickly, without the need to talk
- Call Alert (Encode/Decode)
 - Inform unavailable users that you're trying to reach them, and receive alerts of incoming calls when you're a short distance away from your radio
- Radio Check (Encode/Decode)
 - Check whether another user's radio is activated, and let others check your radio status
- Emergency (Encode)
 Sounds an alarm or alerts dispatcher in urgent situations

II) Quik Call II Signalling

- Call Alert (Encode/Decode)
- Voice Selective Call (Encode/Decode)

III) Dual Tone Multiple Frequency (DTMF) Signalling

Other GP338 Features:

- Channel Scan
- Time-Out-Timer
- PL/DPL
- Busy Channel Lockout

ACCESSORIES SOLUTION

Battery Options:

Flexible choice of batteries:

- NiCD Battery
- High Capacity NiMH Battery
- Ultra High Capacity NiMH Battery
- Factory Mutual Approved NiCD & NiMH Batteries
- Lithium Ion Battery

Powerful impres™

Smart Energy Solution

The impres™ Smart Energy System helps battery maintenance, predicts end-of-service life and provides real-time battery usage information.

GP338 Specifications

*Frequency (MHz): Channel Capacity: Power Supply:			29-42 / 35-50 / 136-174 / 330-400 / 403-470 / 450-527 128 Channels Provided through rechargeable battery - 7.5V														
									DIMENSIONS:			н	x	w	x	D	
									With Standard High Capacity NiMH Battery:			137mm	Х	57.5mm	х	37.5mm	
With Ultra High Capacity NiMH Battery:			137mm	х	57.5mm	Х	40.0mm										
With NiCD Battery:			137mm	х	57.5mm	х	40.0mm										
With Lilon Battery:			137mm	Х	57.5mm	Х	33.0mm										
			(Radio footprint height excluding knobs)														
WEIGHT:																	
With Standard High Capac			428 gm														
With Ultra High Capacity NiMH Battery:			508 gm														
With NiCD Battery:			458 gm														
With Lilon Battery:			358 gm														
AVERAGE BATTERY LIFE @ 5	5/5/90 CYCLE		Low Pow	er	High Pow	er											
With Standard High Capacity NiMH Battery:			11 hours		8 hours												
With Ultra High Capacity NiMH Battery:			14 hours		11 hours												
With NiCD Battery:			12 hours		9 hours	iours											
With Lilon Battery:			11 hours		8 hours												
Sealing:			Withstands rain testing per MIL STD 810 C/D/E and IP54														
Shock and Vibration:			Protection provided via impact resistant housing exceeding														
			MIL STD 810-C/D/E and TIA/EIA 603														
Dust and Humidity:			Protection provided via environment resistant housing exceeding														
			MIL STD 810 C/D/E and TIA/EIA603														
TRANSMITTER			RECEIVER	₹													
SPECIFICATION	Low Band	VHF/UHF	SPECIFICA	ATION		Low Ban	d	VHF/UHF									
*Frequency (MHz)	29 - 42, 35 - 42	136-174 / 330-400 /	*Frequenc	cy (MHz)		29 - 42, 3	5 - 42	136-174 / 330-400 /									
		403-470 / 450-527						403-470 / 450-527									
Frequency separation	Full bandsplit#		Frequency	/ separation		Full bands	split#										
Channel spacing	12.5 / 20 / 25kHz		Sensitivity	(12dB SINAD) EIA	.30μV		.25µV									
Freq Stability:			Intermodu	lation (EIA)		65dB		70dB									
(-30oC to 60oC,+25oC Ref.)	± 0.0010%	+/- 0.00025%	Adjacent (Channel Select	ivity	60dB @12	2.5,	60dB @ 12.5kHz,									
Power	6W	5W (VHF)				70dB @ 2	5kHz	70dB @ 25kHz									
		4W (UHF)	Spurious F	Rejection		70dB											
Modulation limiting	±2.5 @ 12.5kHz, ±4.0 @ 20kHhz,		Rated Aud	dio	500 mW												
	±5.0 @ 25kHz		Audio Dist	tortion		3%											
FM Hum & Noise	40dB		Hum and I	Noise		-45dB @ 1	12.5kHz, -50d	IB @ 25kHz									

Audio Response (300-3000Hz)

Conducted Spurious Emission

+1 to -3dB

-57dBm < 1Ghz, -47dBm > 1Ghz / FCC Part 15

3%

36 dBm < 1 GHz /

30 dBm > 1 GHz

+1 to -3dB

12.5 kHz 11K0 F3E / 25 kHz 16K0F3E

Not applicable to Low Band

Conducted/Radiated Emission

(from 6 dB/octave pre-emphasis 300-3000Hz)

Modulation FCC Type

Audio Response

Audio Distortion

Availability subject to country law and regulations.
 Radios meet applicable regulatory requirements.
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 Specifications are not representative of all radios and may vary in different radios.

Portable Military Standards 810 C, D, & E

	810 C		810 D		810 E	
Applicable MIL-STD	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2
High Temp	501.1	1, 2	501.2	1, 2	501.3	1, 2
Low Temp	502.1	1	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	1, 2	506.2	1, 2	506.3	1, 2
Humidity	507.1	2	507.2	2, 3	507.3	2, 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, 4	516.4	1, 4

Factory Mutual Approval

GP338 radio units are certified by Factory Mutual Approvals as intrinsically safe for use in Division 1, Class I, II, III, Groups C,D,E,F,G and Division 2, Class I, Groups A,B,C,D, when ordered with the Factory Mutual approved battery option.

Motorola: Reliability & Quality



ACCELERATED LIFE TESTING

Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EIA R5-3168 in Shock, Vibration, Dust, Humidity, IP54 for Sealing.



MII STD 910C D AND E

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



ISO 9001 STANDARD

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



Enhance Your Radio's Capabilities

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√ulti-unit Charge



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With Standard High Capacity NiMH Battery:	137mm x	(57.5mm	Х	37.5mm	
With Ultra High Capacity NiMH Battery:	137mm x	(57.5mm	X	40.0mm	
With NiCD Battery:	137mm x	(57.5mm	X	40.0mm	
With Lilon Battery:	137mm x	(57.5mm	X	33.0mm	
	(Radio footprir	nt heig	ght excluding kno	bs)		
WEIGHT:						
With Standard High Capacity NiMH Battery:	428 gm					
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AVERAGE BATTERY LIFE @ 5/5/90 CYCLE	Low Power		High Pow	er		
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Shock and Vibration:	Protection pro	vided	via impact resist	ant housi	ng exceeding	
	MIL STD 810-	-C/D/E	and TIA/EIA 603			
Dust and Humidity:	Protection pro	ovided	via environment	resistan	t housing exceeding	
	MIL CTD 010	CIDIE	and TIA/EIA603			

TRANSMITTER			RECEIVER				
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Freq Stability:			Intermodulation (EIA)	65dB	70dB		
(-30oC to 60oC,+25oC Ref.)	± 0.0010%	+/- 0.00025%	Adjacent Channel Selectivity	60dB @12.5,	60dB @ 12.5kHz,		
Power	6W	5W (VHF)		70dB @ 25kHz	70dB @ 25kHz		
		4W (UHF)	Spurious Rejection	70dB			
Modulation limiting	±2.5 @ 12.5kHz, ±4.0 @ 20kHhz,		Rated Audio	500 mW			
	±5.0 @ 25kHz		Audio Distortion	3%			
FM Hum & Noise	40dB		Hum and Noise	-45dB @ 12.5kHz, -50dB @ 25kHz			
Conducted/Radiated Emission	36 dBm < 1 GHz /		Audio Response (300-3000Hz)	+1 to -3dB			
	30 dBm > 1 GHz		Conducted Spurious Emission	Conducted Spurious Emission -57dBm < 1Ghz, -47dBm > 1Ghz / FCC			
Modulation FCC Type	12.5 kHz 11K0 F3E /	25 kHz 16K0F3E					
Audio Response							
(from 6 dB/octave pre-emphasis	300-3000Hz)						
	+1 to -3dB						
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