

GP328 & GP338 Specifications

GENERAL - LB, VHF, UHF

*Frequency (MHz)	29 - 42 / 35 - 50 / 136 - 174 / 330 - 400 / 403 - 470 / 450 - 527	
Channel Capacity:	GP328 is 16 Channels	GP338 is 128 Channels
Power Supply:	Provided through rechargeable battery - 7.5V	
DIMENSIONS:	H	W
With Standard High Capacity NiMH Battery:	137mm x 57.5mm x 37.5mm	D (Radio footprint height excluding knobs)
With Ultra High Capacity NiMH Battery:	137mm x 57.5mm x 40.0mm	
With NiCD Battery:	137mm x 57.5mm x 40.0mm	
With LiIon Battery:	137mm x 57.5mm x 33.0mm	
WEIGHT:	GP328	GP338
With Standard High Capacity NiMH Battery:	420 gm	428 gm
With Ultra High Capacity NiMH Battery:	500 gm	508 gm
With NiCD Battery:	450 gm	458 gm
With LiIon Battery:	350 gm	358 gm
AVERAGE BATTERY LIFE @ 5/5/90 CYCLE	Low Power	High Power
With Standard High Capacity NiMH Battery:	11 hours	8 hours
With Ultra High Capacity NiMH Battery:	14 hours	11hours
With NiCD Battery:	12 hours	9 hours
With LiIon 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	VHF / UHF	SPECIFICATION	VHF / UHF
*Frequency (MHz)	136-174 / 330-400 / 403-470 / 450-527	*Frequency (MHz)	136-174 / 330-400 / 403-470 / 450-527
Frequency separation	Full bandsplit	Frequency separation	Full bandsplit
Channel spacing	12.5 / 20 / 25kHz	Sensitivity (12dB SINAD)/EIA	25µV
Freq Stability(-30°C to 60°C, +25°CRef.)	+/- 0.00025%	Intermodulation(EIA)	70 dB
Power	5W (VHF) 4W (UHF)	Adjacent Channel Selectivity	60 dB @ 12.5kHz, 70dB @ 25kHz
Modulation limiting	±2.5 @ 12.5kHz, ±4.0 @ 20kHz, ±5.0 @ 25kHz	Spurious Rejection	70 dB
FM Hum & Noise	-40 dB	Rated Audio	500 mW
Conducted/Radiated Emission	-66 dBw	Audio Distortion	3%
Modulation FCC Type	12.5 kHz 11K0F3E 25 kHz 16K0F3E	Hum and Noise	-45 dB @ 12.5kHz, -50 dB @ 25kHz
Audio Response (from 6 dB/octave pre-emphasis 300-3000Hz)	+1 to -3 dB	Audio Response(300-3000Hz)	+1 to -3dB
Audio Distortion	3%	Conducted Spurious Emission	-57dBm < 1Ghz, -47dBm > 1Ghz, FCC Part 15

Low Band Specification:

TRANSMITTER	
SPECIFICATION	VHF / UHF
*Frequency (MHz)	29 - 42, 35 - 50
Channel Spacing	12.5 / 20 / 25 KHz
Freq. Stability (-30°C to 60°C, +25°C Ref.)	±0.0010%
Power	6W
Modulation limiting	±2.5@12.5 khz, ±5.0 @20khz, ±5.0 @25 Khz
FM Hum & Noise	-40 dB
Conducted/Radiated Emission	-66 dBw
Audio Response (from 6 dB/octave pre-emphasis 300-3000Hz)	+1 to -3 dB
Audio Distortion	3%

RECEIVER	
SPECIFICATION	VHF / UHF
Sensitivity (12 dB SINAD)	.30µV
Intermodulation	65 dB
Adjacent Channel Selectivity	60 dB @ 12.5, 70 dB @ 25kHz
Spurious Rejection	70 dB
Rated Audio	500 mW
Audio Distortion @ Rated Audio	3%
Hum and Noise	-45 dB @ 12.5kHz, -50 dB @ 25 kHz
Modulation FCC Type	25kHz 16K0F3E
Audio Response (300 - 3000 Hz)	+1 to -3 dB
Conducted Spurious Emission	-57 dBm < 1 GHz, -47 dBm > 1 GHz, FCC Part 15

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



Portable Military Standards 810 C, D, & E

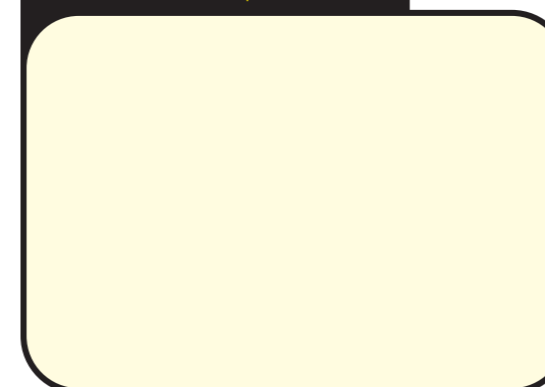
	810C		810D		810E	
Applicable MIL-STD	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2
High Temp	501.1	1, 2	501.2	1, 2	501.3	1, 2
Low Temp	502.1	1	502.2	1, 2	502.3	1, 2
Temp. Shock	503.1	1	503.2	1	503.3	1
Solar Radiation	505.1	1	505.2	1	505.3	1
Rain	506.1	1, 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

GP328 and GP338 Key Features and Benefits:


Features	GP328	GP338
X-PAND™ Audio Technology		Motorola's voice compression and expansion technology that produces crisper, clearer and stronger audio quality, allowing you to keep communicating, even in any noisy environment.
Emergency Siren		Easy to access, one-touch button with piercing alarm to seek help in critical situation.
Switchable RF Power Level		Optimize coverage and conserve battery consumption.
Programmable Channel Spacing of 12.5 / 25 kHz mode		Flexible and easy migration of channel spacing requirements in any situation.
Repeater/Talkaround Enable/Disable		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.
Internal Voice Operated Transmission(VOX)		Hands-free operation with voice activated transmission on optional headsets.
Flexible Battery Options		Choice of batteries: Standard High Capacity and Ultra High Capacity NiMH Battery, NiCD Battery or the lightweight Lithium Ion battery
Tight / Normal Squelch		Flexibility to switch to tight squelch to filter out excessive noise: or, normal squelch for normal coverage.
Field Retrofit Option Boards		Easy to install, affordable add-on functionality whenever your needs arise. Option Boards are available for: i) DTMF Decode for in-coming calls capability. ii) Voice Storage for recording and playing back voice messages.
	GP328	GP338
Channels	Maximum of 16 channels to organise work groups with ease and efficiency.	Maximum of 128 channels to organise work groups with ease and efficiency.
Battery Strength Indicator	Tri-colour LED Battery Gauge with early warning on low battery strength.	Easy to read on-screen LCD display indicator alerting user on low battery strength.
Name & Tone Tagging	Tone tagging only with capability to assign up to 8 different ringing tones to 8 specific users/talkgroups.	Name and tone tagging with capability to assign 8 different ringing tones and visual caller ID to 8 specific users/talkgroups.
14-Character Alpha Numeric Display Monitor	Not Available	Easy to read dot matrix text display.
Received Signal Strength Indicator	Not Available	Easy to read on-screen display indicator alert user on signal strength.
Clock and Reminder Alarm	Not Available	Set time stamp on incoming recorded messages: Or, set the alarm to remind of important appointments.
Menu Keys	Not Available	Select functions through easy to navigate menu keys.
Other GP328 & GP338 Features:	Channel Scan Time-Out-Timer PL/DPL Busy Channel Lockout	Channel Scan Time-Out-Timer PL/DPL Busy Channel Lockout

 **MOTOROLA**
Commercial, Government and Industrial Solutions Sector

For more information, please contact:



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TWO-WAY RADIOS

contact



control

GP328
GP Series Portable Radios
GP338



The Power Tool For Contact & Control

Professional Radio

The Choice of Professionals



Motorola Two-Way Radio: Designed for People Who Want Contact and Control

By simply pressing a button, you can contact one, one dozen, or one hundred people, instantly. That is the power of two-way radio. Unlike any other form of communication, two-way can link individuals or entire groups together without costly usage fees. Two-way radio is what today's smart professionals use to stay competitive. They know that through effective two-way communication their customers' demands can be immediately met and productivity dramatically increased. Two-way allows teams of employees to stay in constant communication, working toward a common goal - getting the job done.

Instant Connection, Optimum Investment

With an affordable one time fixed investment cost and no talktime charges, Motorola's GP Series brings new level of productivity to your workplace. Small-to-large companies, in virtually all industries, use Motorola Two-Way Radio—you get instant communication with people on the move.

*Public and Private Security:

When every second counts, instant communication at a push of the button is what differentiates two-way radios from other wireless communications systems. Whether your police patrols or security checks are on-site locally, or spread over a wide area covering multiple locations, Motorola Two-Way Radio provides clear audio reception for an efficient operation.

*Manufacturing:

With machinery and people spread over a large area, you have the most challenging tasks on hand — how to keep in touch to stay in control? Equip everybody with reliable Motorola Two-Way Radio. They are robust and easy to use, enabling teamwork and co-operation with increased productivity to your bottom line.

*Mining:

Be it a coal mine or a diamond mine, if you work in a high-noise underground tunnel amidst flying dust and debris, Motorola Two-Way Radio gives instantaneous connection at a simple press of the button.

*Construction:

Increased efficiency and safety is what you can expect with the ruggedly designed Motorola Two-Way Radio. From directing the crane operator to scheduling and

co-ordinating a pipe shipment, you are informed and in control at all times. Push a button and you are in touch instantly with your project foreman and even the hospital if need be, for greater safety reinforcements to on-site accidents.

*Oil and Gas:

From day to day operations to fighting oil spills, fire, or just about any life threatening situations in an offshore oil refinery, you can rely on Motorola Two-Way Radio. Ruggedly designed to perform under the most drilling conditions, you get even greater mobility with hands free accessories like headset and earset.

*Hotels:

Conducting floor-to-floor security checks, tackling sprinkler bursts in hotel rooms and managing understaffed and overstretched ballroom staff, Motorola Two-Way Radio is a smart investment. Instant response through Motorola Two-Way Radios will surely guarantee guest satisfaction and ensure a clock-work hotel operation.

Introducing Motorola Professional Radio Series As Dedicated As You Are

Designed to fit the way you work, the Professional Radio Series offers you simple solutions to your complicated work life: yet provides the level of contact you need to meet your unique business requirements. It keeps you mobile in and out of your workplace. Outdoor professionals will find that the radio has all the power and durability they need to accomplish their jobs, even in the harshest environments. Indoor professionals will enjoy its lightweight, ergonomic design, ensuring your organisation is running at the highest level of efficiency at all times.

The Professional Series comes in two models— GP328 with 16 channels and optional retrofit keypad; and GP338 with 128 channels. Voice quality is critical for effective communications. The Professional series of radios can be heard in almost any environment because of Motorola's technology of voice compression and expansion called X-PAND™. Audio quality is crisper, clearer and stronger, allowing you to keep communicating, even in any noisy environment. Easy-to-use key features include one-touch high-pitch alert tone for emergency, full MDC Signalling, group call, alpha and tone tagging for constant monitoring of

communication, and PTT ID. The optional Lithium Ion battery makes the radio one of the lightest in its range. The Professional Radio Series is the ultimate solution for instant contact and control.

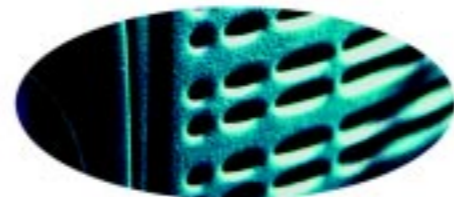
GP328—Making the Difference to Your Business

The Motorola GP328 is an affordable solution for professionals who need to stay in contact but don't require extra features. This workhorse brings practicality to an organisation's two-way communications solution. It can easily increase productivity by keeping its users in contact, yet streamlines their radio use—allowing them to concentrate on their job. The GP328 is designed to endure those bumps and bounces of industries such as hotels, warehousing operations, property management, retails, schools and construction sites.

Communicate in clearer audio quality, result of the special built-in X-PAND™ feature. The user-friendly GP328 comes with intuitive programmable buttons for easy manipulation in any situation. Make quick and hassle-free telephone call from the optional retrofit keypad with groups outside your organization, anytime, anywhere. Battery life lasts longer with the switchable RF power level. GP328's powerful signalling features keep you constantly connected to your team. With GP328, you can be in even when you're out. All these smart features to enhance your productivity.

GP328 — The Practical Radio for those who need ...

- A simple and easy to operate two-way radio.
- To contact people who are mobile and are often away from their desk.
- To make several calls to repeat the same message.
- To manage a facility or more than one building.
- Majority of your company's communication needs are within the vicinity.
- To communicate within a close vicinity.



GP338—Versatile Communication On The Go

The GP338 is the natural choice for someone who is constantly on the go and need an intelligent powerhorse to talk two-way and ensure increased productivity with reduced downtime. It is especially ideal for builders, contractors, engineers, security officers, miners, surveyors and more because they offer an expandable list of features.

Like other model in the series, the GP338 offers superb audio clarity. Feature such as caller identification where incoming caller's name is displayed through the 14-character Alpha Numeric display allows immediate communication of vital information without wasting time identifying callers. Universally recognizable icons on the radio's large LCD monitor clearly displays its features and commands. It's so easy to use as you scroll through the menu. Gain effortless one-touch communication with the 128 channels available.

And if you require communication with groups outside your organisation, the versatile GP338 is capable of making and receiving telephone calls and pages from virtually anyone, anywhere. Truly, the GP338's expandability makes it an essential communications tool for any organization.

GP338 — The Versatile Radio for those who need ...

- To communicate frequently with multiple work groups.
- To be on the move outdoor most of the time.
- To communicate in a high-noise environment.
- To co-ordinate law enforcement and emergency.
- Constant up-to-the-minute information.

The Professional Radio Series Signalling Features:

The Professional Series supports these Signalling systems:
MDC1200:

- PTT-ID: Every time the PTT button is pressed, a unique ID is sent. This allows the dispatcher to identify which radio is transmitting.
- Call Alert: If your call to a radio is unanswered, you can leave a page for that person. The radio emits an alert tone until a response is made.
- Voice Selective Call: The radio receives an individual or group voice message with an alert to indicate that it is a selective call.
- Radio Check: Auto check if radio is operating or within range.
- Selective Radio Inhibit: Radio can be disabled over-the-air from control system preventing unauthorised usage of stolen or lost radio.

Quik Call II:

- Call Alert: Voiceless paging with continuous alert tones that alert user on incoming calls.
- Voice Selective Call: Paging alert followed by a voice message.

*Dual Tone Multiple Frequency(DTMF)Signalling Encode:

Easy access to a land-line telephone network or to operate remote control devices.

* GP328 non-keypad model does not offer DTMF encode feature.

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 your productivity. 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.

GP338



GP328



Key Accessories:



Transformer



Antenna



Rapid-rate Desktop
Charger



Battery & Belt Clip



Carry Case



Remote Speaker
Microphone

Two-Year Warranty

Each Motorola radio is backed by a two-year warranty on radio parts and labour (one-year warranty on the battery, charger, antenna and belt clip).

Motorola: Reliability & Quality



Accelerated Life Testing
Stringent Motorola's Accelerated Life Testing simulating five years of hard use in real life, EIA RS- 316B in Shock, Vibration, Dust, Humidity, IP54 for Sealing.



MIL-STD 810C, D and E
Stamp of approval from the U.S. Military for use in rough environments.



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