

# GP328 Plus & GP338 Plus Portable Radios

Motorola's Smallest Professional Radio. Compact Versatile easy to use



# GP328 Plus and GP338 Plus Portable Radios



## Common Features

### Advanced Audio Technology

Sound quality is critical for effective communications. The GP Plus Radio series is specially equipped with Motorola's voice compression and expansion technology called X-PANDTM. The X-PANDTM feature enables crisper, clearer and stronger audio quality, allowing users to continue communicating even in noisy conditions. In addition, low-level expansion enables further improvements in audio quality by reducing unwanted background noise usually heard during pauses in conversation.

### LED Battery Gauge

The tri-colour LED battery gauge at the top of the radio alerts the users to recharge the battery should the battery level run low.

### Switchable RF Power level

By just pressing one button, users can switch to a low power when communicating within limited range coverage or switch to a high power level when further distance is required. High transmit power optimises range coverage while a low transmit power conserves battery consumption.

### Repeater/Talkaround Enable/Disable

Users have the freedom to communicate through a repeater for wide area coverage, or bypass a repeater and talk directly to another radio if the coverage is within the range or when the repeater fails.

### Tight/Normal Squelch

Users have the flexibility to protect their communication by selecting to a tight squelch to filter interference of unwanted weak signal; or switch to normal squelch to increase coverage.

### Lithium Ion Battery Option

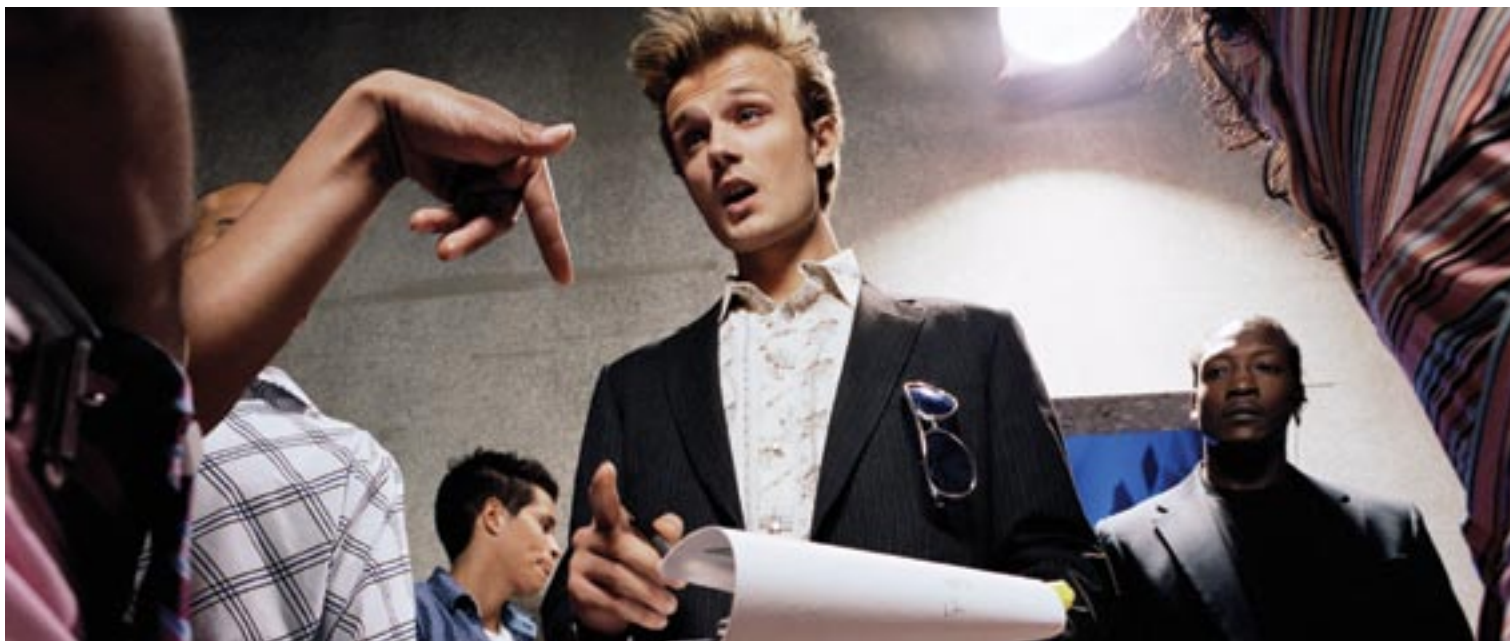
Using the latest technology in battery chemistry, Motorola's GP Plus series offers a Lithium Ion battery option which provides high power at a lighter weight.

### Programmable Channel Spacing

#### (12.5/20/25 Khz)

The series allows programmable channel spacing of 12.5/20/25 kHz; offering flexibility and easy migration of channel spacing requirements when the need arises.





# GP328/338 Plus Features & Benefits



## GP328 Plus 4ch

### 4 channel

Provides users with 4 channels to organise different work groups to meet their different communication needs.

### Channel Scan

Allows the user to monitor activities on different channels.

### Signalling Features

The GP328 Plus 4 channel model offers the following MDC1200 signalling:

- PTT-ID (Encode)
- Radio Check (Decode)

### Emergency "Personal Safety" Siren

At the touch of a button the Emergency "Personal Safety" Siren can be activated emitting an ear piercing alarm.

### PL/DPL

Private Line and Digital Private Line enables multiple work groups to be allocated to a common channel.

### Time-Out-Timer

Will time out communication after a predetermined time, allowing channel access to more users.

### Busy Channel Lockout

In the event of a busy channel the radio will alert the user that another person is on the channel.



## GP328 Plus 16ch

Building upon the features of the GP328 Plus 4Ch, the GP328 Plus 16Ch has the following additional features:

### 16 channels

Provides users maximum of 16 channels to organise different work groups to meet their different communication needs.

### Tone Tagging

Allows 8 different ringing tones to be assigned to 8 specific

users/talkgroups providing audio caller identification to these 8 groups.

### Emergency Alarm/siren And Emergency Call

In addition to the easy-to-use, one touch emergency "Personal Safety" siren button which emits a piercing alarm, the GP328 Plus 16Ch has an Emergency Call function which when activated in the event of critical situations will send a 'pre-canned' alert back to a pre-determined radio or base.

### Enhanced Signalling Features

MDC1200:

- Call Alert (Decode)
- Voice Selective Call (Decode)
- Selective Radio Inhibit Quick Call II:
- Call Alert (Decode)
- Voice Selective Call (Decode)
- Dual Tone Multiple Frequency (DTMF) Signalling (Encode)

## GP338 Plus 128ch

Equipped with an alpha-numeric keypad and display the GP338 Plus offers enhanced functionality in addition to the features of the GP328 Plus series.

### 128 Channels

Provides up to a maximum of 128 channels providing greater flexibility in organising different work groups.

### 14-Character Alpha-Numeric Dot Matrix display

The 14 character alpha-numeric display allows immediate communication of vital information such as PTT ID, radio strength indicator and signal strength indicator. In addition, the user-friendly icons make the information easy to read and understand. The keypad and display illuminations also provide the visibility to operate your radio in the dark.

### Received Signal Strength Indicator

An easy to read on screen display indicator notifies users of signal strength in their vicinity.

### Name & Tone Tagging

The capability of assigning 8 different ringing tones and visual caller IDs to 8 specific users/talkgroups enhances audio and visual caller identification for these 8 groups.

### Battery Strength Indicator

Easy to read on-screen LCD display indicator alerts users on low battery strength.

### Menu Keys

The easy to navigate menu keys allow users to select relevant functionalities.

### PTT-ID

Every time the PTT button is pressed, it enables the transmission of the caller ID.

### Status/Messages

This feature enables you to replace frequently used voice calls with status messages, saving you valuable communication time.

### Call Alert

If your call to a radio has no response, the radio will emit an alert tone until the other party takes action.

### Voice Selective Call

The radio users receive a unique individual or group voice message with an alert to indicate that it is a selective call.

### Priority Scanning

Allows activity on different channels to be monitored. Any incoming call will be automatically switched to another available channel so that the call can be received.

# Motorola GP328 Plus non-keypad and GP338 Plus keypad two-way radios – the smallest in Motorola's Professional Series



Compact and light, fitting easily into the palm of your hand

## Compact, Light and Rugged

Compact and instant communication is important to many operations, as is the ability to be mobile and move freely without being weighed down by your communication tools.

Motorola's newest professional two-way radio packs a range of cutting edge innovations into one compact and lightweight radio designed to continue the Motorola heritage of offering the very best that portable radios can offer.

The Motorola GP328 Plus non-keypad and GP338 Plus keypad two-ways radios - the smallest in Motorola's Professional Series, are compact and light, fitting easily into the palm of your hand. But don't let the size fool you. Built to Motorola's renowned quality standards they are packed with advanced technology ensuring uncompromising radio performance.

Whatever industry you are from the GP Plus Series provides a tough, compact and lightweight communications solution.

### Security:

From transporting money to overseeing major events or providing professional protection, the rugged palm-sized GP328 Plus & GP338 Plus are lightweight and discreet allowing the user to easily conceal their radio. The specialist range of Motorola Genuine Accessories, such as surveillance equipment, audio headsets, etc, further enhances your radios operation.

### Management:

Maintain a professional image and gain the speed and efficiency of radio communication with the compact and light GP328 Plus and GP338 Plus radios: you are assured of clear, instant communication at the touch of a button.

### Hospitality:

From conducting floor-to floor security checks to addressing urgent conference room requests or delivering personal items, the compact and lightweight GP328 Plus and GP338 Plus radios allow you to serve your guests faster and with increased mobility.

## 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 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.



JMNN4023/JMNN4024  
Slim & Hicap Li-Ion Batteries



JMNN4025  
FM NiMH Battery



PMMN4022  
Remote Speaker Microphone  
Also available PMMN4023 (IP57)



WPLN4185  
Impres Single Unit Charger



WPLN4190  
Impres Multi Unit Charger



VOX/PTT Interface Module  
shown with JMNN4064 Ear  
Microphone BDN6168



PMLN4519  
Earbud with  
Microphone/PTT



PMLN4455  
Accessory Adaptor



\*\*PMLN4421  
Soft Leather Case with  
Swivel Clip



\*\*PMLN4470  
Nylon Case with Swivel Clip



PMLN4521  
Soft Leather Case  
with Swivel Clip



JMKN4123  
Programming Cable

\*\* Recommend for non-keypad models

### Mobile Military Standards 810 C, D, & E

|                    | 810 C   |            | 810 D   |            | 810 E   |            |
|--------------------|---------|------------|---------|------------|---------|------------|
|                    | Methods | Procedures | Methods | Procedures | Methods | Procedures |
| Applicable MIL-STD |         |            |         |            |         |            |
| 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       |



**Accelerated Life Testing**  
Stringent Motorola 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.

### GP328 Plus & GP338 Plus Specifications

| General Specifications                              | VHF/UHF   |
|---|---|
| * Frequency (MHz)                                   | 136 - 174 / 330 - 400 / 403 - 470 / 450 - 527   |
| Channel Capacity                                    | GP328 Plus is available in 4 & 16 Channels<br>GP338 Plus is 128 Channels                          |
| Power Supply  | Provided through rechargeable battery - 7.5V  |
| Dimensions (Radio footprint height excluding knobs) | Height x Width x Depth  |
| With Li-Ion (Slim) Battery:                         | 101.5mm x 55.5mm x 33.0mm   |
| With Li-Ion (Hicap) Battery:                        | 101.5mm x 55.5mm x 38.0mm   |
| Weight  | GP328 Plus      GP338 Plus  |
| With Li-Ion (Slim) Battery:                         | 250g                      265g  |
| With Li-Ion (Hicap) Battery:                        | 270g                      285g  |
| Average Battery Life @ 5/5/90 Cycle                 |   |
| With Li-Ion (Slim) Battery:                         | 10 hours @ Low Power    7 hours @ High Power  |
| With Li-Ion (Hicap) Battery:                        | 14 hours @ Low Power    10 hours @ High Power   |
| 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/EIA603   |
| Dust and Humidity                                   | Protection provided via environment resistant housing exceeding MIL STD 810-C/D/E and TIA/EIA 603 |

| Transmitter Specification                                 | VHF/UHF                                    |
|---|--|
| * Frequency (MHz)   | 136-174 / 330-400 / 403-470 / 450-527      |
| Frequency Separation                                      | Full bandsplit                             |
| Channel Spacing   | 12.5 / 20 / 25kHz                          |
| Freq Stability (-30°C to 60°C, +25°C Ref.)                | 2.5ppm                                     |
| Power Output  | 5W (VHF), 4W (UHF)                         |
| Modulation Limiting                                       | ±2.5 @ 12.5kHz, ±4.0 @ 20kHz, ±5.0 @ 25kHz |
| FM Hum & Noise  | -40dB                                      |
| Conducted/Radiated Emission                               | -36dBm < 1GHz / -30dBm > 1GHz              |
| Modulation FCC Type                                       | 12.5kHz 11K0F3E, 25kHz 16K0F3E             |
| Audio Response (from 6 dB/octave pre-emphasis 300-3000Hz) | +1 to -3dB                                 |
| Audio Distortion  | 3%   |

| Receiver Specification       | VHF/UHF                                   |
|------------------------------|---|
| * Frequency (MHz)            | 136-174 / 330-400 / 403-470 / 450-527     |
| Frequency Separation         | Full bandsplit                            |
| Sensitivity (12dB SINAD) EIA | .25mV                                     |
| Intermodulation (EIA)        | 70dB                                      |
| Adjacent Channel Selectivity | 60dB @ 12.5kHz, 70dB @ 25kHz              |
| Spurious Rejection           | 70dB                                      |
| Rated Audio                  | 500mW                                     |
| Audio Distortion             | 3%  |
| Hum & Noise                  | -40dB                                     |
| Audio Response (300-3000Hz)  | +1 to -3dB                                |
| Conducted Spurious Emission  | -57dBm < 1GHz, -47dBm > 1GHz, 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.



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GP328/338Plus.Aust.Jan07.

BTB MA238