GP Series

The Power Tool for Contact & Control GP328 / GP338







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 feas. Flow-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 dommon goal" entire they de-poly communication, working toward a dommon goal" entire they do do communication, working toward a dommon goal" entire they do do communication, working toward a dommon goal" entire they do do communication, working toward a dommon goal" entire they do do communication, working toward a dommon goal" entire they do go they are they a

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 boally, or spread over a wide area covering multiple locations, Motorola Two-Vay 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 Rado. 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 rugged, designed Motorca Two-Way Rado. From directing the crane operator to seleculing 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 to on-site accidents.)

Oil and Gas:

From day to day operations to fighting oil spills, fire, or just about any ifie threatening situations in an offshore oil refinery, you can rely on Motoroila 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 ballisom staff, Motorob Two-Way Padio is a smart investment. Instart response through Motorob Two-Way Padios will surely guarantee guest sastisfaction and ensure a clock-work hotel operation.



Instant Communication with People on the Move

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 file; yet provides the level of contact you need to meet your unique business requirements. It keeps you mobile in and out of your workpice. Outdoor professionals will find that the radio has all the prover 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 – GP228 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 Matorole's technology of voice compression and expansion called X-PAND**. Audio quality is crisper, clearer and stronger, allowing you to keep communication, even in any noise verironment.

Easy-to-use key features include one-touch high-pitch alert tone for emergency, full MIDC Signalling, group call, alpha and tone tagging for constant monitoring of communication, and PTII D. 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 workforse brings practicality on organisation's sue-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 RP 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 te 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 superth 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 organisation 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. Tuly, the GP338's expandability makes it an essential communications tool for any organisation.



GP328

GP338

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

I) 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.

II) Ouick 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.

III) 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













GP328 & GP338 Specifications

| *Frequency: (MHz) | 29 - 42 / 35 - 50 / 136 - 174 / 330 - 400 / 403 - 470 / 450 - 527 | | | | |
|---|---|--------------------|----------------|----------|--|
| Channel Capacity: | GP328 is 16 Channels | | GP338 is 128 0 | Channels | |
| Power Supply: | Provided throu | igh rechargeable b | attery - 7.5V | | |
| DIMENSIONS: | H | × | W | × | D (Radio footprint height excluding knobs) |
| With Standard High Capacity NiMH Battery: | 137mm | × | 57.5mm | × | 37.5mm |
| With Ultra High Capacity NiMH Battery: | 137mm | × | 57.5mm | × | 40.0mm |
| With NiCD Battery: | 137mm | × | 57.5mm | × | 40.0mm |
| With Lilon Battery: | 137mm | × | 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 Lilon 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 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/EIA 603 | | | | |

| Dust and Humidity: | Protection provided via environment resist | Protection provided via environment resistant housing exceeding MIL-STD 810 C / D / E and TIA/EIA 603 | | | | |
|---|---|---|--|--|--|--|
| 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:(-30oC to 60oC,+25oCRef.) | +/- 0.00025% | Intermodulation(EIA) | 70dB | | | |
| Power | 5W (VHF) 4W (UHF) | Adjacent Channel Selectivity | 60dB @ 12.5kHz, 70dB @ 25kHz | | | |
| Modulation limiting | ±2.5 @ 12.5kHz, ±4.0 @ 20kHz, ±5.0 @ 25kHz | Spurious Rejection | 70dB | | | |
| FM Hum & Noise | -40dB | Rated Audio | 500 mW | | | |
| Conducted/Radiated Emission | -36dBm < 1GHz / -30dBm > 1GHz | Audio Distortion | 3% | | | |
| Modulation FCC Type | 12.5kHz 11K0F3E | Hum and Noise | -45dB @ 12.5kHz, -50dB @ 25kHz | | | |
| | 25kHz 16K0F3E | Audio Response(300-3000Hz) | +1 to -3dB | | | |
| Audio Response (from 6 dB/octave pre-emphasis 300-3000Hz) | +1 to -3dB | Conducted Spurious Emission | -57dBm < 1GHz, -47dBm > 1Ghz, FCC Part 15 | | | |
| Audio Distortion | 3% | | | | | |

| TRANSMITTER | |
|--|---|
| *Frequency (MHz) | 29 - 42, 35 - 50 |
| Channel Spacing | 12.5 / 20 / 25kHz |
| Freq. Stability (-30oC to 60oC, +25oCRef.) | ±0.0010% |
| Power | 6W |
| Modulation limiting | ±2.5@ 12.5kHz, ±5.0 @ 20kHz, ±5.0 @ 25KHz |
| FM Hum & Noise | -40dB |
| Conducted/Radiated Emission | -36dBm < 1 GHz / -30dBm > 1 GHz |
| Audio Response (from 6 dB/octave | +1 to -3dB |
| pre-emphasis 300-3000Hz) | |
| Audio Distortion | 3% |

| V408. |
|---|
| 65dB |
| 60dB @ 12.5, 70dB @ 25kHz |
| 70dB |
| 500 mW |
| 3% |
| -45dB @ 12.5kHz, -50dB @ 25kHz |
| 25kHz 16K0F3E |
| +1 to -3dB |
| -57dBm < 1GHz, -47dBm > 1GHz, FCC Part 15 |
| |

Availability subject to country law and regulations. Radios meet applicable regulatory requirements.

All specifications shown are subject to change without notice. Specifications are not representative of all radios and may vary in different radios.

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 | Flexible and easy migration of channel spacing requirements in any situation. | | | | |
| of 12.5 / 25 kHz mode | | | | | |
| Repeater/Talkaround Enable/Disable | Freedom to communicate via a repeater for wide area cov | erage; 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 | Maximum of 128 channels to organise work groups | | | |
| | with ease and efficiency. | with ease and efficiency. | | | |
| Battery Strength Indicator | Tri-colour LED Battery Gauge with early warning on | Easy to read on-screen LCD display indicator alerting | | | |
| | low battery strength. | user on low battery strength. | | | |
| Name & Tone Tagging | Tone tagging only with capability to assign up to 8 | Name and tone tagging with capability to assign 8 | | | |
| | different ringing tones to 8 specific users/talkgroups. | different ringing tones and visual caller ID to 8 specific users/talkgroups | | | |
| 14-Characher Alpha Numeric | Not Available | Easy to read dot matrix text display. | | | |
| Display Monitor | | | | | |
| 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 | Channel Scan | | | |
| _ | Time-Out-Timer | Time-Out-Timer | | | |
| | | | | | |
| | PL/DPL | PL/DPL | | | |

Portable Milit ary Standards 810 C, D, & E

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

Motorola: Reliability & Quality



ACCELERATED LIFE TESTING Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EIA RS-3168 in Shock, Vibration, Dust, Humidity, IPS4 for Sealing.





ISO 9091 STANDARD

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



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