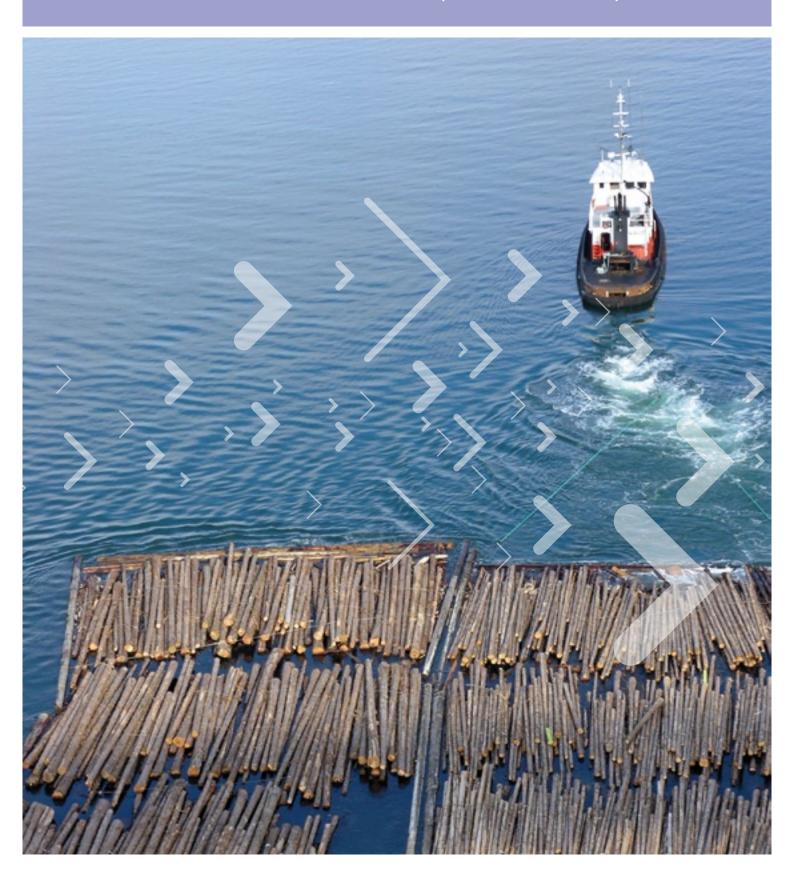


## **GP-R Series**

Professional Submersible Compact Two-Way Radios







## Trusted and proven product platform

For over 75 years, Motorola has been a leader in radio communications. From the earliest walkie-talkies, to the first words transmitted from the moon, and currently, to outfitting today's busy professionals with the most efficient means of radio communications – Motorola has always set the standard, which the industry follows. Our innovative thinking has resulted in many of the wireless communication tools available on the market today.

Motorola's Professional Submersible Series radios complement this philosophy. They are designed and manufactured to meet IP67 specifications for total protection against water and dust intrusion. A cost-effective, three-tier communications solution for professionals operating in hazardous and inhospitable environments, these discreet, compact, ruggedised, water and dust resistant radios are designed with different integral feature sets to suit various operating scenarios.

Most importantly, professionals operating in harsh environments want reliable high quality voice communications. Designed to operate in the harshest of outdoor environments Motorola's GP-R Series radios comprise three models that bring practicality to an organisation's two-way communications solution by keeping users in contact when working in tough environments and allowing them to concentrate on their jobs.



# GP-R COMPACT PROFESSIONAL SUBMERSIBLE SERIES RADIOS

## Submersible, Lightweight, Compact

Rain, wind, snow, dust and exposure to saltwater are every day challenges for professionals who operate in all weathers and environments or occupations where inhospitable conditions are a hazard to conventional communications devices. In such conditions, personal and group safety is a prime consideration when carrying out and managing work programmes. Reliable and efficient communications is therefore critical to completing tasks efficiently and safely.

## For professionals who need to stay in contact

- Airport Operations
- Port & Harbour Authorities
- Transportation & Logistics Depots
- Civil Engineering
- Security
- Construction / Utilities
- Forestry
- Quarrying
- Events Management

### Quality assured design

All GP-R Series radios comply with the following International Standards:

- MIL 810C/D/E/F specifications for resistance to temperature, humidity and other environmental hazards
- IP67 sealing for total protection against dust and water intrusion
- Intrinsically Safe (Factory Mutual) 2 Note: non FU only
- Motorola Accelerated Life Test (ALT) simulates five years of use to prove reliability

### Water- and dust-tight solution

Our GP-R submersible, Compact Professional series of portable two-way radios extends Motorola's radio portfolio to provide exceptional quality, performance, durability and reliability. Deployed at sea ports, airports, construction sites or anywhere that water, dust, mud and grime can compromise efficiency, productivity and even place personnel at risk, the GP-R Series offers a

Small, lightweight and designed for durability, the GP-R Series comprises three radios offering instant contact among all your personnel, helping to keep them productive and safe.



With the Motorola GP-R Series you can select the most suitable and cost-effective solution for the job with the confidence that full communication compatibility across the range is guaranteed. Whether it is simple "talk and listen" functionality or a more sophisticated requirement allowing the user to manage teams and production the GP-R Series fulfils the need.







### **GP344R**

Compact, discrete non-keypad radio; 16 Channels

This is for the professional operating at the workface, possibly in foul-weather clothing, who requires reliable two-way communication with other team members and management plus emergency features to ensure safety.

## **GP366R**

Compact, limited keypad with alphanumeric display; 255 Channels

The GP366R is an effective communication solution for larger organisations with many teams. The radio offers broad functionality; and the display and limited keypad allows users to make the most of the radio features.

## **GP388R**

Compact, full keypad with alpha-numeric display; 255 Channels

The GP388R offers unique versatility allowing the radio to reflect the changing way that professionals need to communicate when working or managing many teams. The full keypad and display allows access easy access to all features as well as giving full control to manage setup such as address book directly on the radio.

## OPERATING FEATURES FOR ALL GP-R RADIOS

#### Signalling

The radio software encompasses Private Line™ and 5-tone signalling, allowing set up of selective calls to individuals or groups and preventing excessive interruption to others.

## X-Pand<sup>™</sup> Voice Compression and Low Leve Expansion

Crisp, clear and strong audio quality in virtually any noisy environment. Low level expansion allows further improvements in audio quality by reducing noise usually heard during pauses in conversation.

#### Voice Operated Transmit (VOX)

Hands-free operation when used with VOX headset accessorv.

#### Adiustable Power Levels

The radio output power has two settings – low power extends battery life and high power allows the radio to transmit over a greater distance

#### **Emergency Signalling**

Sends a help signal to a pre-defined person or group of people.

## Programmable Channel Spacing

Flexible and easy migration of channel spacing requirements in any situation.

#### **Lone Worker**

Added security and safety for individuals who work remotely from their team. The radio enters emergency mode if the user does not respond to the warning signal.

#### **Talkaround**

Freedom to communicate utilising a system or dispatcher for wide-area coverage, or bypass and talk directly to another unit for easy local unit-to-unit communications

#### Whisper

Allows a user to speak quietly into a radio and still be heard clearly.

#### Call Forward

Allows calls to be forwarded to another radic user if you are unable to answer your calls personally.

#### Enhanced Li-Ion Battery Performance

Each GP-R Series radio is fitted as standard with a high-capacity Lithium Ion battery.
Providing for longer battery life and having no memory or 'over-charge' side effects.

## **GP-R SERIES ACCESSORIES**

The GP-R series radio portfolio is supported by a range of genuine Motorola Original Accessories and Batteries to enhance functionality and ensure the highest performance of the radio solution. Whether it is harsh working conditions, noisy environments, long shifts or the focus is on discrete communication, the GP-R series accessories range will meet the need.

#### **Audio Solutions**

Remote Speaker Microphones are versatile and reliable accessories allowing users to remain in full contact without removing the radio from its position at the belt. The range of Speaker Microphones offered with Motorola's Professional Series utilises different technologies to offer enhanced background reduction, earjack for earpiece use for enhanced privacy and of course a Remote Speaker Microphone with the same water intrusion rating as the radio which means submersible in 1 meter of water for 30 minutes.

Other audio solutions include lightweight headsets with different push-to-talk configurations to ensure user comfort at prolonged communication. Heavy duty headsets are offered for harsh and noisy environments to ensure good audio quality as well as offering hearing protection.

The earpiece portfolio offers standard receive only earpieces, combined push-to-talk/microphone ear sets and three wire earpieces for discreet covert communication.

### Battery and Charging Solutions

The power to communicate is vital and requires efficient battery and charging solutions. The GP-R series offers lithium ion batteries both as standard and FM approved together with a range of single and multi unit chargers.



**PMNN4074** IP67 Lithium Ion Battery



**WPLN4189**Multi unit charger Impres (Euro plug)



MDPMLN4519
2 wire earbud with
microphone and PTT
combined



MDPMMN4023
Remote Speaker Microphone
IP57 waterproof



MDJMMN4066 Light weight headset with boom microphone and PTT

### Carrying solutions

The ability to perform the job while staying in contact requires good carrying solutions. The GP-R series offers a range of solutions including belt clips; nylon- and leather carry cases to offer hands free operation and optimised user performance.



**NMN6245** Light weight headset with boom microphone and PTT



**BDN6645** Heavy duty headset with ear cup PTT



**PMLN5089**Nylon carry case for IP67 radios with display



**PMLN5090**Nylon carry case for IP67 radios without display

## GP344R, GP366R, GP388R Specifications

General Specifications								
	GP344R	GP366R	GP388R					
Channel Capacity	16	255	255					
Dimensions: H x W x D (mm) Height excluding knobs	101.5 x 56.5 x 37.0	101.5 x 56.5 x 39.0	101.5 x 56.5 x 39.0					
Weight: (gm) With high capacity Lilon battery (both standard and FM battery)	305	320	320					
Power Supply	Rechargeable battery 7.5v							
Average Battery Life @5/5/90 Cycle: With high capacity Lilon battery (both standard and FM battery)	Low Power		High Power >10 hours					
Average Battery Life @10/10/80 Cycle: With high capacity Lilon battery (both standard and FM battery)	Low Power	9	igh Power 6.5 hours					
Sealing:	Withstands rain testing per MIL STD 810 C/D/E/F and IP67							
Shock and Vibration:	Protection provided via impact resistant housing exceeding MIL STD 810-C/D/E/F and TIA/EIA 603							
Dust and Humidity:	Protection provided via environment resistant housing exceeding MIL STD 810 C/D/E/F and TIA/EIA 603							

Transmitter					
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF1: 403-470 MHz UHF2: 450-527 MHz				
Channel Spacing	12.5/25 kHz				
Frequency Stability (-25°C to +55°C, +25° Ref.)	±2.5 ppm				
Power	136-174: 1-5W 403-470: 1-4W 450-527: 1-4W				
Modulation Limiting	±2.5 @ 12.5 kHz ±5.0 @ 25 kHz				
FM Hum & Noise	-40 dB typical				
Conducted/Radiated Emission	-36 dBm <1 GHz -30 dBm >1 GHz				
Audio Response (300-3000Hz)	+1 to -3 dB				
Audio Distortion	<5% typical				

Receiver						
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF1: 403-470 MHz UHF2: 450-527 MHz					
Channel Spacing	12.5/25 kHz					
Sensitivity (12 dB SINAD) EIA	.35 μV typical					
Intermodulation ETS	-65 dB					
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 25 kHz					
Spurious Rejection	70 dB					
Rated Audio	0.5W					
Audio Response (300-3000Hz)	+1 to -3 dB					

Data is specified for +25°C unless otherwise stated.

\*Availability subject to the laws and regulations of individual countries.

Portable Military Standards 810 C, D, E & F										
Applicable MIL-STD	8° Methods	810C Procedures Metho		810D Methods Procedures		810E Methods Procedures		810F Methods Procedures		
Low Pressure	500.1	1	500.2	2	500.3	2	500.4	2		
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2	501.4	1,2		
Low Temperature	502.1	1	502.2	1,2	502.3	1,2	502.4	1,2		
Temp. Shock	503.1	1	503.2	1	503.3	1	503.4	1		
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1		
Rain	506.1	1,2	506.2	1,2	506.3	1,2	506.4	1,3		
Humidity	507.1	2	507.2	2,3	507.3	2,3	507.4	-		
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	-		
Dust	510.1	1	510.2	1	510.3	1	510.4	1		
Vibration	514.2	8,10	514.3	1	514.4	1	514.5	1		
Shock	516.2	1,2,5	516.3	1,4	516.4	1,4	516.5	1,4		



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Conforms to R&TTE directive 1999/05/EC. Radio meets applicable regulatory requirements. Specifications are subject to change without notice and are issued for guidance purposes only. All specifications listed are typical. Radios meet applicable regulatory requirements.

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