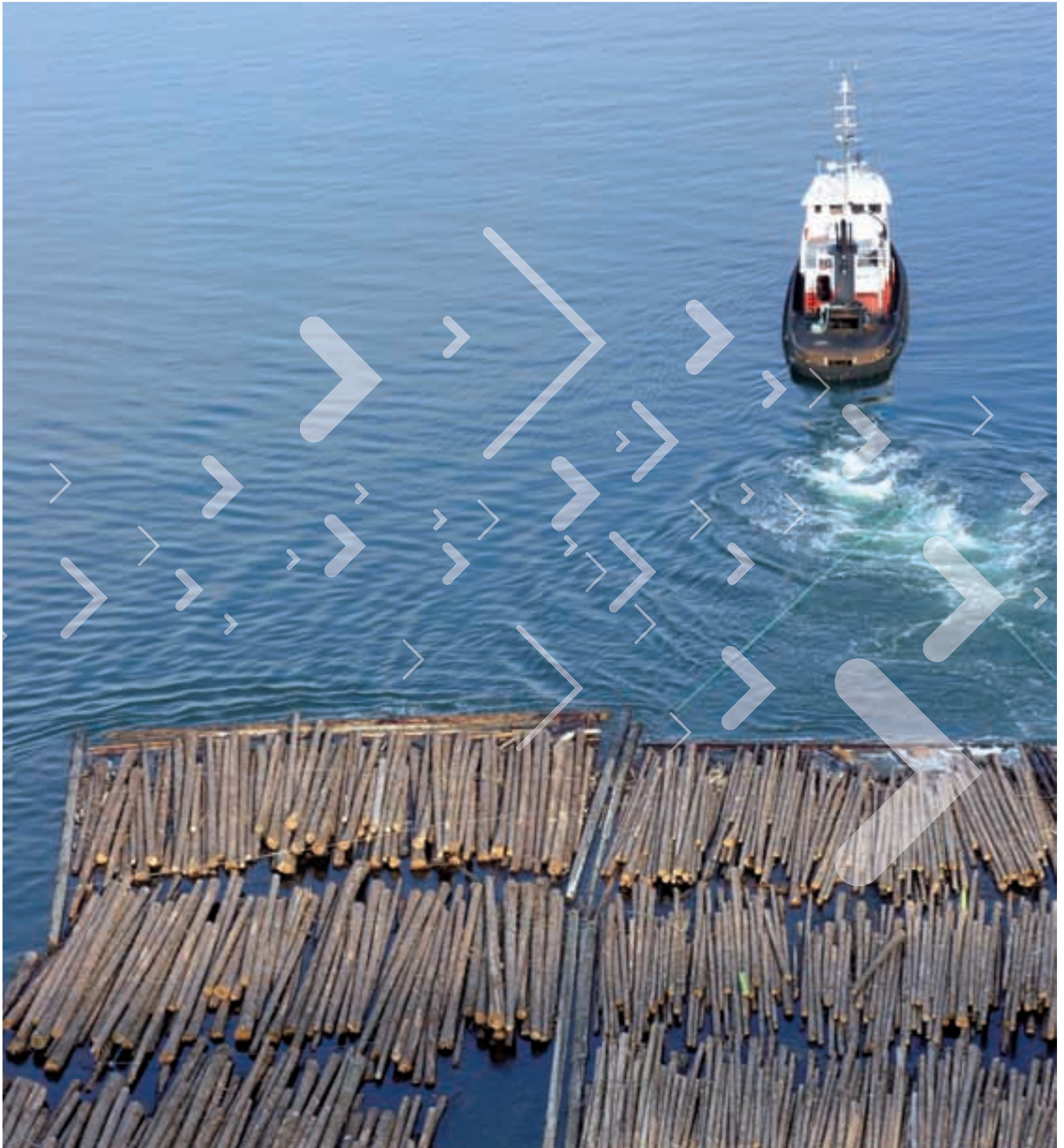




# *GP-R Series*

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.

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 & GP644R**

Compact, discrete non-keypad radio.



**GP366R & GP666R**



Compact, limited keypad with alpha-numeric display.  
**GP388R & GP688R**

Compact, full keypad with alpha-numeric display.

General Specifications			
	GP344R, GP644R	GP366R, GP666R	GP388R, GP688R
Channel Capacity Private Line & 5-tone MPT	16 System Dependent	255 System Dependent	255 System Dependent
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 >13 hours		High Power >10 hours
Average Battery Life @10/10/80 Cycle: With high capacity Lilon battery (both standard and FM battery)	Low Power >8 hours		High 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 Private Line & 5-tone Private Line & 5-tone and MPT	VHF: 136-174 MHz UHF2: 450-527 MHz UHF1: 403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 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 ±4.0 @ 20 kHz ±5.0 @ 25 kHz
Conducted/Radiated Emission	-36 dBm <1 GHz -30 dBm >1 GHz - 4 GHz
Audio Response (300-3000Hz)	+1 to -3 dB

Receiver	
*Frequencies - Full Bandsplit Private Line & 5-tone Private Line & 5-tone and MPT	VHF: 136-174 MHz UHF2: 450-527 MHz UHF1: 403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Sensitivity (12 dB SINAD) EIA	.35 µV typical
Intermodulation ETS	-65 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 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	810C		810D		810E		810F	
	Methods	Procedures	Methods	Procedures	Methods	Procedures	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.

GP-R\_SERIES/BRO-ENG(07/08)

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