



**MOTOROLA**

TWO-WAY RADIOS

## GP644: The Small Popular Radio

The Small Popular Radio is the simple two-way radio solution for professionals who need to stay in contact. The discreet GP644 can increase productivity, keeping users communicating, whilst allowing them to concentrate on the job at hand. With the Small Popular Radio, communication couldn't be easier.



### Operator friendly controls and features include:

- **Signalling**  
*The fully compliant MPT signalling package includes MPT1343, Regionet 43 and ANN modes of operation. Radios are configurable for up to 2 personalities including Talkgroup Select and Conventional signalling.*
- **X-Pand™ Voice Compression and Low Level 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.*
- **Dynamic Regrouping**  
*Provides over-the-air reconfiguration of the radio.*
- **Missed Call Alerts**  
*The radio can store an incoming caller identity and prompt the user to return the call they receive.*
- **Wideband and Programmable Channel Spacing**  
*Provides flexibility in deployment and stocking.*
- **Time-out Timer**  
*Limits the amount of time a user has to continuously transmit on a channel. This allows for more efficient use of the channel.*



As Dedicated As You Are

# Professional Radio

# GP644 Portable Two-Way Radio Specifications

General Specifications	
Channel Capacity	16 (conventional)
Power Supply	Rechargeable battery 7.5v
Dimensions: H x W x D (mm)	Height excluding knobs
With standard Lilon battery	101.5 x 55.5 x 30.5
With high capacity Lilon battery	101.5 x 55.5 x 35.5
Weight: (gm)	
With Standard Lilon battery	250
With high capacity Lilon battery	270
Average Battery Life @5/5/90 Cycle:	Low Power      High Power
With Standard Lilon battery	<9 hours      <7 hours
With high capacity Lilon battery	<13 hours      <10 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

Transmitter	
*Frequencies - Full Bandsplit	UHF 1: 403-470 MHz
Channel Spacing	12.5/20/25 kHz
Frequency Stability (-30°C to +60°C, +25° Ref.)	0.00025%
Power	Low: 1W High: 4W
FM Hum & Noise	-40 dB typical
Spurs/Harmonics	-36 dBm <1 GHz -30 dBm >1 GHz
Audio Response (300-3000Hz)	+1 to -3 dB
Audio Distortion	<5% typical

Receiver	
*Frequencies - Full Bandsplit	UHF 1: 403-470 MHz
Channel Spacing	12.5/20/25 kHz
Sensitivity (12 dB SINAD) EIA	0.35 µV typical
Intermodulation ETS	-65dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 25 kHz
Spurious Rejection	-70 dB
Rated Audio	0.5W
Image Rejection	-70dB
Frequency Stability (-30°C to +60°C, +25° Ref.)	0.00025%

Portable Military Standards 810 C, D, & E						
Applicable MIL-STD	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2
Low Temperature	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

Data for +25°C unless otherwise specified

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

Specifications are subject to change without notice and are issued for guidance purposes only.

All specifications listed are typical. Radios meet applicable regulatory requirements.

Conforms to EC directive 1999/5/EC and EN300 113-1, EN300 113-2

Contact your local Authorised Motorola Dealer to find out more about how communicating with the Professional Radio series will benefit your organisation.



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For exceptional performance, reliability and quality, Motorola Original accessories and batteries are the only options. For full details, please refer to the Professional Radio Series Accessories brochure.



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