



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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