



MOTOROLA

TWO-WAY RADIOS

GP640: The Popular Radio

The Popular Radio is the simple two-way radio solution for professionals who need to stay in contact. The GP640 can increase productivity, keeping users communicating, whilst allowing them to concentrate on the job at hand. With the 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.
- **Option Board Expandability**
You can expand the capabilities of GP640 by adding option boards such as Voice Storage.
- **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.

Please check with your dealer for availability on specific option boards.



As Dedicated As You Are

Professional Radio

GP640 Portable Two-Way Radio Specifications

General Specifications	
Channel Capacity	16 (Conventional Mode)
Power Supply	Rechargeable battery 7.5v
Dimensions: H x W x D (mm)	Height excluding knobs
With standard high capacity NiMH battery	137 x 57.5 x 37.5
With ultra high capacity NiMH battery	137 x 57.5 x 40.0
With NiCD battery	137 x 57.5 x 40.0
With Lilon battery	137 x 57.5 x 33.0
Weight: (gm)	
With Standard high capacity NiMH battery	420
With Ultra high capacity NiMH battery	500
With NiCD battery	450
With Lilon battery	350
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 11 hours
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

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

Transmitter	
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF 1: 403-470 MHz UHF 2: 450-527 MHz
Channel Spacing	12.5/20/25 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
FM Hum & Noise	-40 dB typical
Conducted/Radiated Emission	-36 dBm <1 GHz -30 dBm >1 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response (300-3000Hz)	+1 to -3 dB
Audio Distortion	3%

Receiver	
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF 1: 403-470 MHz UHF 2: 450-527 MHz
Channel Spacing	12.5/20/25 kHz
Frequency Stability (-25°C to +55°C, +25° Ref.)	±2.5 ppm
Sensitivity (12 dB SINAD) EIA	.25 µV typical
Sensitivity (20 dB SINAD) ETS	.50 µV typical
Intermodulation EIA	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Rated Audio	0.5W
Audio Distortion @ Rated Audio	3% typical
Hum & Noise	-40 dB @ 12.5 kHz -50 dB @ 20/25 kHz
Audio Response (300-3000 Hz)	+1 to -3 dB
Conducted Spurious Emission	-57 dBm <1 GHz -47 dBm >1 GHz ETS 300 086

Data for +25°C unless otherwise specified

*Availability subject to individual country's law and regulations.

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 89/336/EEC

Complies with ETS 300 113

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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