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.





As Dedicated As You Are

Professional Radio

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.

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) With standard high capacity NiMH battery With ultra high capacity NiMH battery With NiCD battery With Lilon battery	Height excluding knobs 137 x 57.5 x 37.5 137 x 57.5 x 40.0 137 x 57.5 x 40.0 137 x 57.5 x 33.0	
Weight: (gm) With Standard high capacity NiMH battery With Ultra high capacity NiMH battery With NiCD battery With Lilon battery	 420 500 450 350	
Average Battery Life @5/5/90 Cycle: With Standard high capacity NiMH battery With Ultra high capacity NiMH battery With NiCD battery With Lilon battery	Low Power 11 hours 14 hours 12 hours 11 hours	High Power 8 hours 11 hours 9 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						
	810C		810D		810E	
Applicable MIL-STD	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

Transmitter	
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF: 300-350 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 300-350: 1-4W 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: 300-350 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 Sensitivity (20 dB SINAD) ETS	.25 µV typical .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

*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.

UK Sales Office
Middle East and Africa Headquarters:
Motorola Ltd
Jays Close, Viables Industrial Estate
Basingstoke, Hampshire RG22 4PD
United Kingdom
Tel (01256) 488200
Fax (01256) 488080

Central Europe Headquarters
Eastern Europe, Turkey and
Central Asia Headquarters:
Motorola GmbH
Heinrich Hertz Strasse 1
65232 Taunusstein
Germany
Tel. +49 6128 700
Fax +49 6128 951084

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.







MOTOROLA

Motorola, Professional Radios, As Dedicated As You Are and X-Pand are trademarks of Motorola Inc.
© 1998 Motorola, Printed in the United Kingdom
http://www.mot.com