MOTOROLA

TWO-WAY RADIOS

GP140: The Popular Radio

The Popular Radio is the simple two-way radio solution for professionals who need to stay in contact. The GP140 can easily increase productivity by keeping users communicating, yet streamlines their radio use 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 radio software encompasses Private Line™ and MDC selective signalling.
- Channel Scan
  Allows activity on different communications channels to be monitored and answered.
- 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.
- Voice Operated Transmit (VOX)
  Hands free operation when used with VOX headset accessory.
- Adjustable Power Levels
  The radio output power has two settings - low power extends battery life and high power allows the radio to transmit over a greater distance.
- Escalert Call Features
  Escalating alert tone to alert user of incoming call. Starts at a very low level and increases until call answered.
- Option Board Expandability
  You can expand the existing capabilities by adding one of the following option boards:
  - Encryption for message security.
  - SmarTrunk II for low cost trunking.
  - Voice Storage option board provides voice recorder features allowing you to store and retrieve messages.
- Talkaround
  Freedom to communicate utilising a system or dispatcher for wide area coverage, or bypass and talk directly to another unit for easy local unit-to-unit communications.
- Caller Tone Tagging
  Allows different alert tones to be assigned to different caller identities.
- Programmable Channel Spacing (12.5/20/25 KHz)
  Flexible and easy migration of channel spacing requirements in any situation.

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

GP140 Portable Two-Way Radio Specifications

General Specifications		
Channel Capacity	16	
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

Transmitter	
*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF: 403-470 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
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: 403-470 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

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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