



**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.



## 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.



As Dedicated As You Are

# Professional Radio

# GP140 Portable Two-Way Radio Specifications

General Specifications	
Channel Capacity	16
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: 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	.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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