



# GP140

Communication made easy.



The GP140, one of the market-leading radios in Motorola's Professional Series, is a simple and affordable communication solution for portable users requiring a high-quality radio. It is easy to use with essential functionality and is the ideal entry solution.

With option board capability and a wide range of accessories available within the Professional Series; it's easy to build a tailored communications solution to meet your needs.

## Key Features

### Signalling

- Private Line™
- Conventional / MDC

### Easy to use and set-up

- Programmable buttons
- Ruggedised design

### Protecting users

- Emergency call
- PTT ID
- Time-out timer

### Quality

- MIL Spec 810 compliant
- Meets IP54 environmental standards
- Passed Motorola Accelerated Life Test
- X-Pand™ voice compression technology

### Efficiency

- Channel scanning
- Adjustable power levels for battery life management
- Call management features including call forwarding

### Included as standard

- Battery
- Antenna
- Belt clip
- Accessory dust cover
- User manual

### Accessory options

A wide range of accessory options are available to customise your radio

- Audio accessories
- Batteries and chargers
- Carry options

For full details of available accessories, please contact your local dealer or distributor

# Specification Sheet

## GENERAL SPECIFICATIONS

Channel Capacity	16	
Power Supply	Rechargeable battery 7.5V	
Dimensions H x W x D (mm) with:	Height excluding knobs	
High capacity NiMH battery	137 x 57.5 x 37.5	
Ultra high capacity NiMH battery	137 x 57.5 x 40.0	
NiCD battery	137 x 57.5 x 40.0	
Li-Ion battery	137 x 57.5 x 33.0	
Weight (gm) with:		
Standard high capacity NiMH battery	420	
Ultra high capacity NiMH battery	500	
NiCD battery	450	
Li-Ion battery	350	
Average battery life @ 5/5/90 Cycle with:	Low Power	High Power
High capacity NiMH battery	11 hours	8 hours
Ultra high capacity NiMH battery	14 hours	11 hours
NiCD battery	12 hours	9 hours
Li-Ion battery	11 hours	8 hours
Sealing:	Withstands rain testing per MIL STD 810 and IP54	
Shock and Vibration:	Protection provided via impact resistant housing exceeding MIL STD 810 and TIA/EIA 603	
Dust and Humidity:	Protection provided via environment resistant housing exceeding MIL STD 810 and TIA/EIA 603	
Operating temperature:	-30°C to +60°C	
Storage temperature:	-40°C to +85°C	

## TRANSMITTER

*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF: 403-470 MHz
Channel Spacing	12.5 / 20 / 25 kHz
Frequency Stability	1.5 kHz @ 12.5 kHz
(-30°C to +60°C, +25°C Ref.)	2.0 kHz @ 20/25 kHz
Power	136-174: 1-5W 403-470: 1-4W
Modulation Limiting	±2.5 @ 12.5 kHz ±4.0 @ 20 kHz ±5.0 @ 25 kHz
Conducted/Radiated Emission	-36 dBm < 1 GHz -30 dBm ≥ 1...4 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz

## RECEIVER

*Frequencies - Full Bandsplit	VHF: 136-174 MHz UHF: 403-470 MHz
Channel Spacing	12.5 / 20 / 25 kHz
Sensitivity (20 dB SINAD)	0.50 µV typical / 12.5 kHz
Intermodulation	65 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Conducted Spurious Emission	-57 dBm < 1 GHz -47 dBm ≥ 1...4 GHz

## Portable Military Standards 810

Applicable MIL-STD	810C		810D		810E		810F		810G	
	Methods	Proc./Cat.	Methods	Proc./Cat.	Methods	Proc./Cat.	Methods	Proc./Cat.	Methods	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	505.5	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/Hot A1, II/Hot (A1)
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temp. Shock	503.1	-	503.2	I/A1C3	503.3	I/C1A3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-	507.5	-
Salt Fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Blowing Sand	-	-	510.2	II	510.3	II	510.4	II	510.5	II
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV

Data is specified for +25°C unless otherwise stated

\*Availability subject to individual country's law and regulations. Specifications are subject to change without notice and are issued for guidance only. All specifications listed are typical. Radios meet applicable regulatory requirements. Conforms to R&TTE directive 1999/5/EC



Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. (EIA RS-218) is Shock, Vibration, Dust, Humidity, IP54 for Sealing.



Compliance with ISO 9001 Standard on experimental quality system assurance on design, development, production, installation and servicing of a product.



Stamp of Approval from the U.S. Military for use in rough environments.



To ensure compliance with RF energy exposure standards and regulations, use only Motorola-approved batteries and accessories. Use of non-Motorola approved batteries and accessories may result in RF energy exposure standards being exceeded.

For more information please contact your local Motorola Authorised Dealer or Distributor



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GP140-RE\_UK(11/09)

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