

## 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*



# 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.

# SPECIFICATIONS

## GENERAL SPECIFICATIONS

|   |   |                   |
|---|---|-------------------|
| <b>Channel Capacity</b>                         | 1   |                   |
| <b>Power Supply</b>                             | Rechargeable battery 7.5v   |                   |
| <b>Dimensions: H x W x D (mm)</b>               | Height excluding knobs  |                   |
| <b>With Standard high capacity NiMH battery</b> | 137 x 57.5 x 37.5   |                   |
| <b>With Ultra high capacity NiMH battery</b>    | 137 x 57.5 x 40.0   |                   |
| <b>With NiCD battery</b>                        | 137 x 57.5 x 40.0   |                   |
| <b>With Li-Ion battery</b>                      | 137 x 57.5 x 33.0   |                   |
| <b>Weight: (gm)</b>                             |   |                   |
| <b>With Standard high capacity NiMH battery</b> | 420   |                   |
| <b>With Ultra high capacity NiMH battery</b>    | 500   |                   |
| <b>With NiCD battery</b>                        | 450   |                   |
| <b>With Li-Ion battery</b>                      | 350   |                   |
| <b>Average battery Life @5/5/90 Cycle:</b>      | <b>Low Power</b>  | <b>High Power</b> |
| <b>With Standard high capacity NiMH battery</b> | 11 hours  | 8 hours           |
| <b>With Ultra high capacity NiMH battery</b>    | 14 hours  | 11 hours          |
| <b>With NiCD battery</b>                        | 12 hours  | 9 hours           |
| <b>With Li-Ion</b>                              | 11 hours  | 8 hours           |
| <b>Sealing:</b>                                 | Withstands rain testing per MIL STD 810 C/D/E and IP54  |                   |
| <b>Shock and Vibration:</b>                     | Protection provided via impact resistant housing exceeding MIL STD 810-C/D/E and TIA/EIA 603      |                   |
| <b>Dust and Humidity:</b>                       | Protection provided via environment resistant housing exceeding MIL STD 810 C/D/E and TIA/EIA 603 |                   |
| <b>Operating temperature:</b>                   | -20°C to +55°C  |                   |

## PORTABLE MILITARY STANDARDS 810 C, D & E

| Applicable MIL-STD      | 810C    |            | 810D    |            | 810E    |            |
|-------------------------|---------|------------|---------|------------|---------|------------|
|                         | Methods | Procedures | Methods | Procedures | Methods | Procedures |
| <b>Low Pressure</b>     | 500.1   | 1          | 500.2   | 2          | 500.3   | 2          |
| <b>High Temperature</b> | 501.1   | 1,2        | 501.2   | 1,2        | 501.3   | 1,2        |
| <b>Low Temperature</b>  | 502.1   | 1          | 502.2   | 1,2        | 502.3   | 1,2        |
| <b>Temp. Shock</b>      | 503.1   | 1          | 503.2   | 1          | 503.3   | 1          |
| <b>Solar Radiation</b>  | 505.1   | 1          | 505.2   | 1          | 505.3   | 1          |
| <b>Rain</b>             | 506.1   | 1,2        | 506.2   | 1,2        | 506.3   | 1,2        |
| <b>Humidity</b>         | 507.1   | 2          | 507.2   | 2,3        | 507.3   | 2,3        |
| <b>Salt Fog</b>         | 509.1   | 1          | 509.2   | 1          | 509.3   | 1          |
| <b>Dust</b>             | 510.1   | 1          | 510.2   | 1          | 510.3   | 1          |
| <b>Vibration</b>        | 514.2   | 8,10       | 514.3   | 1          | 514.4   | 1          |
| <b>Shock</b>            | 516.2   | 1,2,5      | 516.3   | 1,4        | 516.4   | 1,4        |

Data for +25°C unless otherwise specified

## TRANSMITTER

|                                      |   |
|--------------------------------------|---|
| <b>*Frequencies - Full Bandsplit</b> | VHF: 136-174 MHz<br>UHF: 403-470 MHz              |
| <b>Channel Spacing</b>               | 12.5/20/25 kHz                                    |
| <b>Frequency Stability</b>           | ±2.5 ppm  |
| <b>(-25°C to +55°C, + 25°C Ref.)</b> |   |
| <b>Power</b>                         | 136-174:1-5W<br>403-470: 1-4W                     |
| <b>Modulation Limiting</b>           | ±2.5 @ 12.5 kHz<br>±4.0 @ 20 kHz<br>±5.0 @ 25 kHz |
| <b>FM Hum &amp; Noise</b>            | -40 dB typical                                    |
| <b>Conducted/Radiated Emission</b>   | -36 dBm <1 GHz<br>-30 dBm >1GHz                   |
| <b>Adjacent Channel Power</b>        | -60 dB @ 12.5 kHz<br>-70 dB @ 20/25 kHz           |
| <b>Audio Response (300-3000Hz)</b>   | +1 to -3 dB                                       |
| <b>Audio Distortion</b>              | 3%  |

## RECEIVER

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

\*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 EC directive 89/336/EEC

Complies with EN 300 113

Contact your local Motorola Authorised Dealer to find out more about how communicating with the Professional Radio series will benefit your organisation.



### Motorola Limited, EMEA Headquarters

Jays Close, Viabes Industrial Estate, Basingstoke, RG22 4PD, UK  
Telephone: +44 (0)1256 358211

www.motorola.com

Motorola and the Stylised M Logo are registered in the U.S. Patent & Trademark Office.  
All other product or service names are the property of their respective owners.  
© Motorola, Limited 2006

GP140-RE(08/06)

For more information contact your local Motorola Authorised Two-Way Radio Dealer.

