

## KEY FEATURES

**Signalling**

- Fully compliant to MPT1327
- Includes MPT1343, RegioNet 43 and ANN dialling plan

**Adaptable and versatile**

- Option board expandability
- Wideband and programmable channel spacing
- Easily programmed in the field to support additional features

**Easy to use and set-up**

- One touch dialling
- Programmable buttons for easy access to frequently used features
- Ruggedised design and compelling user interface
- Simple menus and alpha-numeric phonebook

**Quality**

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

**Efficiency**

- Missed call alerts
- Dynamic regrouping
- Talk Group Select mode

**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*



# GP680

One Radio. Endless Possibilities.

The GP680, one of the market-leading radios in Motorola's Professional Series, is an effective feature-packed communication solution for any organisation on MPT networks. The intuitive menu with full keypad and display, together with one touch dialling and easy telephone interconnect, keeps users in touch to increase productivity.

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>	16 (Conventional Mode)	
<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 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>	428	
<b>With Ultra high capacity NiMH battery</b>	508	
<b>With NiCD battery</b>	458	
<b>With Li-Ion battery</b>	358	
<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>	500.1	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 UHF: 300-350 MHz UHF1: 403-470 MHz
<b>Channel Spacing</b>	12.5/20/25 kHz
<b>Frequency Stability (-25°C to +55°C, + 25°C Ref.)</b>	±2.5 ppm
<b>Power</b>	136-174: 1-5W 300-350: 1-4W 403-470: 1-4W
<b>Modulation Limiting</b>	±2.5 @ 12.5 kHz ±4.0 @ 20 kHz ±5.0 @ 25 kHz
<b>FM Hum &amp; Noise</b>	-40dB typical
<b>Conducted/Radiated Emission</b>	-36 dBm <1 GHz -30 dBm >1GHz
<b>Adjacent Channel Power</b>	-60 dB @ 12.5 kHz -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 UHF: 300-350 MHz UHF 1: 403-470 MHz UHF 2: 450-527 MHz
<b>Channel Spacing</b>	12.5/20/25 kHz
<b>Frequency Stability (-25°C to +55°C, +25°Ref.)</b>	±2.5 ppm
<b>Sensitivity (12 dB SINAD) EIA</b>	.25µV typical
<b>Sensitivity (20 dB SINAD) EN</b>	.50µV typical
<b>Intermodulation EIA</b>	70 dB
<b>Adjacent Channel Selectivity</b>	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
<b>Spurious Rejection</b>	70 dB
<b>Rated Audio</b>	0.5W
<b>Audio Distortion @ Rated Audio</b>	3% typical
<b>Hum &amp; Noise</b>	-40 dB @ 12.5 kHz -50 @ 20/25 kHz
<b>Audio Response (300-3000 Hz)</b>	+1 to -3 dB
<b>Conducted Spurious Emission</b>	-57 dBm <1 GHz -47 dBm <1 GHz EN 300 086

## Your Distributor/Dealer:



**Communication Specialists Ltd. Unit 20, Murrell Green Business Park,  
London Road, Hook, Hampshire. RG27 9GR United Kingdom**  
**Tel. +44(0)1256766600 Fax. +44(0)1256766500**  
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\*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.