



GP688

One Radio. Endless Possibilities.

The compact GP688, 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.

Wide 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

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

Adaptable and versatile

- Compact model for greater portability
- 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

Specification Sheet

GENERAL SPECIFICATIONS

Power Supply	Rechargeable battery 7.5V	
Dimensions H x W x D (mm) with:	Height excluding knobs	
Li-Ion battery	101.5 x 55.5 x 33.0	
High capacity Li-Ion battery	101.5 x 55.5 x 38.0	
Weight (gm) with:		
Li-Ion battery	265	
High capacity Li-Ion battery	285	
Average battery life @ 5/5/90 Cycle with:	Low Power	High Power
Li-Ion battery	>9 hours	>7 hours
High capacity Li-Ion battery	>13 hours	>10 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	UHF1: 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	UHF1: 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 three years of hard use in real life. EIA RS-3168 in Shock, Vibration, Dust, Humidity, IP54 for Sealing.



Compliance with ISO 9001 Standard on international 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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