

Specifications

GENERAL SPECIFICATIONS

*Frequency	136 - 174 / 403 - 470 / 800	
Power Supply		
(Provided through rechargeable battery)	7.5 V	
Dimensions: H x W x D		
(Radio footprint height excluding knobs)		
With Standard High		
Capacity NiMH Battery	137mm x 57.5mm x 37.5mm	
With Ultra High		
Capacity NiMH Battery	137mm x 57.5mm x 40.0mm	
With NiCd Battery	137mm x 57.5mm x 40.0mm	
With Lilon Battery	137mm x 57.5mm x 33.0mm	
Weight	GP540	GP580
With Standard High		
Capacity NiMH Battery	420 gm	428 gm
With Ultra High		
Capacity NiMH Battery	508 gm	508 gm
With NiCd Battery	450 gm	458 gm
With Lilon Battery	350 gm	358 gm
Average Battery Life		
@5/5/90 Cycle	Low Power	High Power
With Standard		
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 Li-Ion 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	

TRANSMITTER

	VHF	UHF	800 MHz
*Frequency (MHz)	136-174	403-470	806-825
			851-870
Channel Spacing	12.5/20/25 kHz		25 kHz
Frequency Stability			
(-30°C to +60°C, +25°C Ref.)	±2.5ppm	±1.5ppm	
Power	1 - 5W	1 - 4W	1 - 2.5W
Modulation Limiting	±2.5 kHz @ 12.5 kHz		
	±4.0 kHz @ 20 kHz ±5.0 kHz @ 25 kHz		
FM Hum & Noise	-40 dB typical		
Spurious Harmonics	-36dBm < 1GHz -36dBm typical		
Conducted/Radiated Emission	-30 dBm > 1GHz		
Modulation Type	12.5 kHz 11K0F3E		
	25 kHz 16K0F3E		
Adjacent Channel Power	-60 dB @ 12.5 kHz		
	-70 dB @ 20/25 kHz		
Audio Response			
(from 6dB/octave pre-emphasis, 300 - 3000Hz)	+1 to -3 dB		
Audio Distortion	3% typical		

RECEIVER

	VHF/UHF	800 MHz
*Frequency (MHz)	136-174, 403-470	851-870
Sensitivity (12dB SINAD)	0.35 µV typical	
Intermodulation EIA	-65 dB	
Adjacent Channel Selectivity	-60 dB @ 12.5 kHz	
	-70 dB @ 20/25 kHz	
Spurious Rejection	-70 dB	
Rated Audio	0.5 W	
Audio Distortion	3% typical	
Hum and Noise	-40 dB typical	
Conducted Spurious Emission	-57dBm < 1 GHz	
	-47 dBm > 1GHz	
All Rx Hum & Noise numbers assume low level expander is used		

PORTABLE MILITARY STANDARDS 810 C, D, & E

	810C		810D		810E	
Applicable MIL-STD	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

\*Availability subject to country law and regulations. Specifications subject to change without notice. All specifications shown are typical. Radios meet applicable regulatory requirements.

ISO 9001 Standard

Compliance with ISO 9001 Standard - an international quality system assurance on design, development, production, installation and servicing of a product. Radio meets applicable regulatory requirements to ETSI Euro norms and conforms to

European directive 1999/5/EC

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




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GP540/580/BRO-ENG(03/07)

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# GP540, GP580 PROFESSIONAL SERIES

SmartZone™ Trunked Portable Radios  
as dedicated as you are





# Motorola GP540 and GP580 SmartZone™ Trunked Radios

The GP SmartZone™ Trunked Radios offer sophisticated and effective communications; critical to the success of your dynamic organisation.

Improve your operational efficiency and manage communications complexity with SmartZone™ trunking technology from Motorola; giving you access to StartSite, SmartNet and SmartZone systems.

As one of the market-leading radios in Motorola's Professional Series; these fully-featured radios are designed with the requirements of today's businesses and public safety organisations in mind.

## Efficient and intelligent communications

SmartZone™ trunking technology from Motorola ensures spectrum efficiency whilst the dual mode capability allows the user easy access to conventional operation. These features combined with the failsoft mode keep you in touch when you need it most.

## Seamless communications

RSSI roaming extends reach beyond a single trunked site. When moving between trunked sites, the radio seamlessly switches to the strongest available signal. In trunked mode, Dynamic regrouping allows different talk groups to be amalgamated to create a temporary work group without taking radios out of service for reprogramming.

## Stay in touch

In addition to standard scanning, the GP540 and GP580 offer priority scan; the radio will switch to the talkgroup with the highest priority when activity is detected, regardless of mode.

## Manage emergencies

An emergency alarm allows priority access to talkgroups and identifies the radio user who requires assistance. Emergency calls can be directed to specific talkgroups, sites or announcement groups. The radio can be programmed to transmit automatically allowing an emergency situation to be monitored remotely. Silent emergency mode disables all radio audio and visual indicators in sensitive circumstances.

## Ensure privacy and maintain control

SmartZone™ ensures communications remain private whilst selective radio inhibit allows a radio to be blocked remotely should it be lost or stolen. The remote monitor function lets authorised individuals listen to voice traffic, should a security or user issue be identified.

## Crisp and clear audio

Designed to be heard and understood even in the noisiest of industrial environments, the GP540 and GP580 feature strong audio quality and Low Level Expansion (LLE) to reduce noise in conversational pauses.

## Reliable and robust

Tested to MIL Spec 810 and Motorola Accelerated Life Test standards to ensure that they will operate in the toughest conditions.

## Tailored to your needs

A wide range of mounting options and accessories enable you to tailor your communications solution to meet your own needs, including audio accessories, batteries, chargers and carry options. All radios are supplied with a battery, antenna, belt clip and dust cover as standard. For full details of available accessories please contact your local dealer.

## GP540 SmartZone™ Trunked Radio affordable and easy to use

**Designed for professionals who need to keep in touch and improve productivity.**

- 16 talkgroups or channels allow the GP540 to meet many different communication needs.
- Multiple system interoperability offers the flexibility of access to up to 15 different talkgroups on up to 16 different systems if required.
- 4 programmable buttons for easy access to frequently used features.
- Private call decode enables users to receive a one-to-one call from another radio user without disturbing the team; assuring privacy when discussing sensitive issues.
- Call alert decode delivers missed call notification via a series of audible signals to minimise disruption.
- Telephone linterconnect allows users to receive an incoming telephone call through the trunked system for enhanced communication flexibility.
- Compatible with MDC1200 conventional systems to deliver additional benefits.



Earpieces for discreet covert use



Impress chargers



Impress batteries



Headsets to communicate hands-free



Carry cases

## GP580 SmartZone™ Trunked Radio smart and versatile

**Designed for those requiring an enhanced set of features; the GP580 builds upon the functionality of the GP540.**

- Enhanced user experience through an alpha-numeric and iconic display allows easy access to the intuitive menu and giving instant access to talkgroup identities, phone book and contact list.
- One touch dialling gives speed-dial style access to talkgroups or individuals.
- 250 modes keep a large number of diverse user talkgroups constantly in touch with each other, to easily manage users.
- Discreet communications allows users to send and receive one-to-one radio calls through a preprogrammed contact list or via direct keypad entry. Eight statuses and 16 preprogrammed message options can be used when voice communication is inappropriate.
- Missed call identity is displayed and supported by a series of audible signals.
- DTMF