

Technical Specifications

General - VHF, UHF GP240 & GP280	
*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: With Ultra High Capacity NiMH Battery: With NiCd Battery: With Lilon Battery:	137mm x 57.5mm x 37.5mm 137mm x 57.5mm x 40.0mm 137mm x 57.5mm x 40.0mm 137mm x 57.5mm x 33.0mm
Weight: With Standard High Capacity NiMH Battery: With Ultra High Capacity NiMH Battery: With NiCd Battery: With Lilon Battery:	420 gm 428 gm 508 gm 508 gm 450 gm 458 gm 350 gm 358 gm
Average Battery Life @5/5/90 Cycle: With Standard Capacity NiMH Battery: With Ultra High Capacity NiMH Battery: With NiCd Battery: With Lilon Battery:	Low Power High Power 11 hours 8 hours 14 hours 11 hours 12 hours 9 hours 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

Portable Military Standards 810 C, D, & E						
Applicable MIL-STD	810C		810D		810E	
	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

Transmitter			
All Specs Measured to TIA/EIA-603	VHF	UHF	800 MHz
*Frequency (MHz):	136-174	403-470	806-825 851-870
Frequency Separation:	Full Bandsplit		
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:	<-34 dB @ 12.5 kHz -40dB <-38 dB @ 20 kHz <-40 dB @ 25 kHz		
Conducted/Radiated Emission	-66 dBm < 1 GHz -66 dBm < 1 GHz -60 dBm > 1 GHz -60 dBm > 1 GHz		
Modulation FCC Type:	12.5 kHz 11K0F3E 25 kHz 16K0F3E		
Adjacent Channel Power:	-60 dBc @ 12.5 kHz -70 dBc -70 dBc @ 20/25 kHz		
Audio Response: (from 6dB/octave pre-emphasis, 300 - 3000Hz)	+1 to -3 dB		
Audio Distortion	3%		

Receiver	
All Specs Measured to TIA/EIA-603	VHF/UHF 800 MHz
*Frequency (MHz):	136-174, 403-470, 851-870
Frequency Separation:	Full Bandsplit
Sensitivity (12dB SINAD)	0.25 V
Intermodulation:	-70 dB -65 dB
Adjacent Channel Selectivity:	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Spurious Rejection:	-70 dB
Rated Audio: Audio Distortion:	0.5 W 3% typical
Hum and Noise:	-34 dBm @ 12.5 kHz -37dB -38 dBm @ 20 kHz -40 dBm @ 25 kHz
Conducted Spurious Emission:	-57dBm < 1 GHz -57 dB < 1 GHz -47dBm < 1 GHz -47 dB < 1 GHz
All Rx Hum & Noise numbers assume low level expander is used	

*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

MOTOROLA and the Stylized M logo and all other trademarks indicated as such are trademarks of Motorola, Inc. © copyright Motorola, Inc. 2001

For more information, please contact:

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
www.comm-spec.com info@comm-spec.co.uk



TWO-WAY RADIOS



As Dedicated As You Are

Professional Radio

GP Series
Privacy Plus Trunked
Two-Way Radios

GP Series
GP Series



Motorola GP240 and GP280 Privacy Plus Trunked Radios for StartSite and SmartNet Systems

In today's dynamic environment, effective and instant communications are critical to the success of your business. Improve operational efficiency, health and safety and fine-tune the emergency response mechanism with the latest Privacy Plus trunked radios from Motorola.

This series comes in 2 models - the GP240 (non-keypad version) and the GP280 (full keypad version) based on the popular global Motorola Professional Series platform designed with the requirements of today's businesses and industries in mind.

Motorola Quality & Reliability

A market leader and innovator in the wireless communications business for over 70 years with good reason - The GP240 and GP280 come with Motorola's reliability and quality standards. Built to the exacting industry specifications of IP54 (environmental resistance) and MIL-STD 810, the stamp of approval from the U.S. Military for use in the most challenging environments. A Factory Mutual (FM) version is also available.

Designed to withstand robust industrial usage, Motorola GP240 and GP280 have also been subjected to Motorola's rigorous 5 year Accelerated Life Testing.

Enhanced features for today's StartSite and SmartNet users:

- ▼ **Crisp and Clear Audio Quality**
Designed to be heard and understood even in the noisiest of industrial environments, the GP240 and GP280 feature strong audio quality and Low Level Expansion (LLE) to reduce noise in conversational pauses.
- ▼ **Seamless Communications**
The Automatic Multiple Site Selection (AMSS) feature extends communications beyond the reach of a single trunked site. When moving between trunked sites, the radio will seamlessly switch to the next available site.
- ▼ **Prevent Unauthorised Use**
Selective Radio Inhibit allows a radio to be blocked remotely should it be lost or stolen.
- ▼ **User Flexibility**
Dual Mode Capability allows the user easy access to both the trunked system and conventional operation.
- ▼ **Get the Message**
Regardless of mode (trunked or conventional), Talkgroup Scan lets the radio scan both talkgroups and channels for activity.
- ▼ **Failsafe Operation**
In the unlikely event of an infrastructure problem, the radio will automatically revert to a pre-assigned conventional voice channel.

GP240 Privacy Plus Trunked Radio



GP240 - Affordable and Easy to Use

Designed for professionals who need to keep in touch and enhance productivity:

- ▼ **Meeting Your Communication Requirements**
The 16 talkgroups or channels allow the GP240 to meet many different communication needs.
- ▼ **Multiple System Interoperability**
Offers the flexibility of access to up to 15 different talkgroups on up to 10 different systems if required.
- ▼ **Quick and Easy Access**
Assign regularly used functions to the 4 Programmable Buttons.
- ▼ **Avoid Downtime**
Low Battery Alert notifies users of low battery through the LED indicator and audible alert.

Call Flexibility

- ▼ **Private Call Decode**
Users can receive a one-to-one call from another radio user without disturbing the team. Assures privacy when discussing sensitive issues.
- ▼ **Call Alert Decode**
Missed call notification via a series of audible signals minimising disruption.
- ▼ **Telephone Interconnect**
Receive an incoming telephone call through the trunked system for enhanced communication flexibility.

GP280 Privacy Plus Trunked radio



GP280 - Smart and Versatile

Building upon the features of the GP240, GP280 users benefit from the following increased functionality:

- ▼ **Enhanced User Experience**
The Alpha-numeric and iconic display allows easy access to the intuitive menu and gives instant access to talkgroup identities, phone book and contact list. Along with a battery gauge icon, these are all features that make using the GP280 easy.
- ▼ **Manage A Number of Workers**
90 modes keep a large number of diverse user talkgroups constantly in touch with each other.
- ▼ **Discreet Communications**
Send and receive one-to-one radio calls through a pre-programmed contact list or via direct keypad entry.
- ▼ **Missed Call Identity**
Displayed and supported by a series of audible signals.
- ▼ **Telephone Interconnect**
Make and receive telephone calls through the trunked system for enhanced communication flexibility.



Motorola provides a complete two-way radio communication solution with a comprehensive selection of accessories: batteries, chargers, remote speaker microphones, earpieces, headsets and carry cases. This extensive portfolio of Motorola original accessories allows users to customise further their Professional Radio and satisfy their individual communications needs above and beyond those already incorporated in the standard package.

Accessories and Batteries

Category	Part No.	Description	
Batteries	HNN9008	NiMH High Capacity Battery	
	HNN9009	NiMH Ultra High Cap Battery	
	HNN9010	NiMH Ultra High Cap FM Battery	
	HNN9011	NiCd High Capacity FM Battery	
	HNN9012	NiCd High Capacity Battery	
	HNN9013	Lithium Ion Battery	
Battery Chargers	MDHTN3000	120V Single Unit Charger (US Plug) Not CE Compliant	
	MDHTN3001	230V Single Unit Charger (Euro Plug)	
	MDHTN3002	230V Single Unit Charger (UK Plug)	
	MDHTN3003	120V Multi Unit Charger (US Plug) Not CE Compliant	
	MDHTN3004	230V Multi Unit Charger (Euro Plug)	
	MDHTN3005	230V Multi Unit Charger (UK Plug)	
	NLN7967	Multi Unit Charger Wall Mount Kit	
	MDRLN4883	Travel Charger	
	Carry Accessories	HLN9701	Nylon Carry Case with Standard Belt Loop
		HLN9952	Belt Clip Carry Holder
HLN9714		50.8mm Spring Belt Clip	
HLN9844		38.1mm Spring Belt Clip	
<i>with Nickel Metal Hydride and Nickel Cadmium battery</i>			
HLN9652		Leather Case with Standard Belt Loop	
HLN9676		Leather Case with Swivel Belt Loop	
HLN9689		Leather Carry Case with Standard Belt Loop, for Keypad Model	
HLN9694		Leather Carry Case with Swivel Belt Loop, for Keypad Models	
<i>with Lithium ion battery</i>			
HLN9665		Leather Case with Standard Belt Loop	
HLN9670		Leather Case with Swivel Belt Loop	
HLN9677		Leather Carry with Standard Belt Loop, for Keypad Models	
HLN9690		Leather Carry Case with Swivel Belt Loop, for Keypad Models	
Antennas	PMAD4012	VHF 9cm Antenna 136-155MHz	
	PMAD4025	VHF 9cm Antenna 150-161MHz	
	PMAD4013	VHF 9cm Antenna 155-174MHz	
	PMAD4014	VHF 14cm Antenna 136-155MHz	
	PMAD4023	VHF 14cm Antenna 150-161 MHz	
	PMAD4015	VHF 14cm Antenna 155-174MHz	
	NAD6502A	VHF Wideband Antenna 146-174MHz	
	PMAE4002	UHF 9cm Antenna 403-433MHz	
	PMAE4003	UHF 9cm Antenna 438-470MHz	
	NAE6483A	UHF Whip Antenna 403-470MHz	
	NAF5037	800 MHz Half Wave Whip Antenna 806-870MHz	
	NAF5042	800 MHz Half Wave Whip Antenna 806-941MHz	
	Audio Accessories	MDHMN9052	Remote Speaker Microphone Standard
		MDHMN9053	Remote Speaker Microphone (Noise Cancelling)
MDHMN9054		Public Safety Microphone (for UHF models only)	
ENMN4014		3 Wire Mini Lapel Mic Kit (Black)	
ENMN4017		3 Wire Mini Lapel Mic Kit (Beige)	
MDPMLN4418		Earbud with Combined PTT/Microphone	
MDRLN4885		Earbud with 3.5mm Jack	
MDRMN4022		Discreet Earpiece & Microphone Beige	
MDRMN4029		Discreet Earpiece & Microphone Black	
MDRMN4028		Discreet Earpiece, Black	
MDRMN4021		Discreet Earpiece, Beige	
RLN4760		Comfortable Earpiece, Right, Small	
RLN4761		Comfortable Earpiece, Right, Medium	
RLN4762		Comfortable Earpiece, Right, Large	
RLN4763		Comfortable Earpiece, Left, Small	
RLN4764		Comfortable Earpiece, Left, Medium	
RLN4765		Comfortable Earpiece, Left, Large	
MDRLN4941		Receive Only Earpiece with Translucent Tube	
WADN4190		Flexible Ear Receiver with Cable	
ENMN4012		Breeze Headset	
ENMN4016	Behind the Head Headset		
MDRMN4018	Lightweight Headset with PTT		
MDRMN4019	Medium Weight Headset with PTT		
NTN8370	Acoustic Tube with Clear Voicetube (Extreme Noise Kit)		
NTN8371	Acoustic Tube with Rubber Ear Tip (Low Noise Kit)		
ENMN4010	Noise Com™		
ENMN4018	Helmet Com™ and PTT Module		
EN1006	VHF Vehicle Adapter 136-174MHz		
EN1007	UHF Vehicle Adapter 403-470MHz		