

# **KEY FEATURES**

### Signalling

- Fully compliant to MPT1327
- Includes MTP1343, RegioNet 43 and ANN dialling plan
- Configurable up to 2 personalities including talkgroup select or conventional signalling

### Easy to use and set-up

- Programmable buttons
- PC programmable\*

# Adaptable and versatile

- Option board capability allows additional features and customer-specific functions\*
- Easily programmed in the field to support additional features
- Data capability allows interface to third party terminals to enhance communications

#### **Protecting users**

- Emergency signalling
- Lone worker
- Time-out timer
- External alarm

# Quality

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

#### Efficiency

- Dynamic regrouping
- Missed call alert
- External alarm
- Voice storage
- Wideband and programmable channel spacing
- Car radio mute

# Included as standard

- Battery power cable
- Enhanced compact microphone
- Low profile trunnion kit

# Accessory options

A wide range of accessory options are available to customise your radio

- Microphones and desktop solutions
- In-vehicle accessories
- Mounting kits

\* For further information, please contact your local dealer or distributor



The GM640, one of the market-leading radios in Motorola's Professional Series, offers simple communications for organisations on MPT networks requiring an effective communication tool. It is easy to use with essential functionality; whilst the additional security features offer increased protection for lone and remote workers.

Option boards and a wide range of accessories and portable radios are also available within the Professional Series. It is easy to build a tailored communications solution to meet your needs.

# SPECIFICATIONS

GENERAL				
Specification	VHF	UHF		
Frequency Range	136-174 MHz	403-470 MHz		
Frequency Stability (-30°C to +60°C, 25°C Ref.)	±2.5 PPM	±2 PPM		
Channel Capacity	System dependent			
Channel Spacing	12.5/20/25 kHz			
Power Output	1-25W			
Power Supply	13.2Vdc (10.8 - 15.6 Vdc) negative vehicle ground			
Dimensions (L x W x H)	1-25W: 176 x 174 x 56mm (add 8mm for Volume knob			
Weight	1-25W: 1390g			
Operating Temperature	-30 to 60°C			
Operation Mode	Intermittent	Intermittent		
Sealing	Passes rain testing to IP54			
Shock and Vibration	Meets MIL-STD 810-C,D&E and TIA/EIA 603			
Dust	Meets MIL-STD 810-C,D&E and TIA/EIA 603			
Humidity	Meets MIL-STD 810-	C,D&E and TIA/EIA 603		

RECEIVER				
Specification	VHF	UHF		
Sensitivity (12dBSINAD) (EN)	0.30µV (0.22 µV Typical)			
Intermodulation (EI	) >65 dB			
Adjacent Channel Selectivity (EN)	80 dB @ 25 kHz 75 dB @ 20 kHz 65 dB @ 12.5 kHz	75 dB @ 25 kHz 70 dB @ 20 kHz 65 dB @ 12.5 kHz		
Spurious Rejection (EN)	80 dB @ 20/25 kHz 75 dB @ 12.5 kHz	75 dB @ 20/25 kHz 70 dB @ 12.5 kHz		
Rated Audio (EN)	3W Internal 7.5W & 13W External			
Audio Distortion @ Rated Audio	3% Typical			
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz			
Audio Response (300 to 3000Hz)	+1, -3dB			
Conducted Spuriou Emission per FCC P		n <1 GHz n >1 GHz		

TRANSMITTER		
Specification	VHF/UHF	
Modulation Limiting	±2.5 kHz @ 12.5 kHz ±4.0 kHz @ 20 kHz ±5.0 kHz @ 25 kHz	
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz	
Conducted/Radiated Emissions	-36 dBm < 1 GHz -30 dBm > 1 GHz	
Adjacent Channel Power	-60 dB @ 12.5kHz -70 dB @ 20/25 kHz	
Audio Response (300 to 3000Hz)	+1, -3dB	
Audio Distortion @ 1000 Hz, 60% Rated Maximum Deviation	3% Typical	

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	2	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	2	506.2	2	506.3	2
Humidity	507.1	2	507.2	2,3	507.3	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	516.4	1

Data for +25°C unless otherwise specified

\*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 EN 300 086 and EN 300 113

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



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