

# COMMERCIAL SERIES

## CM140, CM340, CM160 AND CM360

Mobile Radios That Fit Your Budget, Your Business and Your Vehicle



# Keep the lines of communication open

The Commercial Series mobile radios from Motorola offer simple and effective communication, allowing you to focus on your business.

Designed with our customers in mind, whatever business they are in, the Commercial Series has the radios with the feature set to match your requirements. From simple and instant communication to more advanced features, this family of four radios enables work-teams to keep in touch.



**As some of the smallest mobile radios on the market, the robust and rugged Motorola Commercial Series mobile radios offer communicators voice and build quality that will not let them down.**

## Cost effective

Combining the benefits of a dedicated network together with no monthly fee and low investment costs the Commercial Series delivers a professional solution at an affordable price.

## Intuitive and simple

Easy to set-up and use, the Commercial Series delivers superb audio quality and instant communication at the push of a button.

## Reliable and robust

Tested to MIL spec 810F and Motorola's unique Accelerated Life Test standards; ensuring that they will operate in the toughest conditions.

## Versatile communications

From 'selective calling' for one-to-one conversations to 'repeater talkaround' for enhanced coverage, the radios offer a range of communications features to keep you in touch when you need it most.

## Protecting users and equipment

Clever features like 'emergency mode' and 'lone worker' keep employees and your equipment safe and secure; and with the optional footswitch, discretion during emergencies can be ensured.

## CM140 AND CM340

Perfect for those requiring simplicity and ease-of-use

- Single-digit display
- Up to 10 channels of communication
- Two programmable buttons (allowing up to four single-push functions)

## CM160 AND CM360

For those requiring an enhanced range of features

- Eight-character display
- Up to 64 or 100 channels\*
- CM160 - up to four programmable buttons (allowing up to eight single-push functions)
- CM360 - three programmable buttons (for six single-push functions).
- Option board capability allowing additional features and customer-specific functions

\*Some features depend upon the radio communications protocol that is chosen.

Commercial Series mobiles are available in 5 Tone/PL and MDC/PL protocols. Let your local Motorola Authorised Dealer guide you through the benefits of the most suitable solution for your organisation.



With 'lone worker' function, the radio can be set up to request a response from a user at regular intervals. If the user is unable to give the 'okay' message then a defined emergency procedure is activated.



Motorola provides your organisation with the tools to communicate



HSN8145  
External Speaker



GLN7317 Mounting Bracket



HMN3596  
Compact Microphone



RSN4001  
13W External Speaker



RMN5018  
MagOne  
Microphone



MDRMN5029  
Keypad Microphone



RLN4779  
Keylock Mount

## 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 microphones, hands-free communications and in-vehicle mounting.

All radios are supplied with a microphone, mounting bracket and power cable as standard. For full details of available accessories please contact your local dealer or distributor.

Which radio is right for me?

Feature	Product	CM140	CM160	CM340	CM360
Channels		8	64	10	100
Programmable Buttons		2	4	2	3
Option Board Capable		✓	✓	✓	✓
VOX		✓	✓	✓	✓
Make Telephone Calls*		-	✓	✓	✓
Lone Worker		-	-	✓	✓
Emergency		-	-	✓	✓
Receive Telephone Calls*		-	-	✓	✓
Make 1-2-1 and Group Calls		-	-	✓	✓
Receive 1-2-1 and Group Calls		-	-	✓	✓
5 Tone Encode/Decode		-	-	✓	✓
Speed Dials		-	-	✓	✓
Contact List		-	✓	-	✓
Keypad		-	Limited	-	Limited
Backlit 8 Character Display		-	✓	-	✓
Missed calls		-	-	-	✓
Status		-	-	-	✓

\*Requires additional base station and telephone interface

# TECHNICAL SPECIFICATIONS

General Specifications	Mid Band	VHF	UHF
Frequency	Refer to Model Number chart below for channel capacity		
Power	1-25W	1-25W, 25-45W	1-25W, 25-40W
Channel Spacing	12.5/20/25KHz		
Dimensions (HxWxL)	44x169x118mm		
Weight	1.02Kg		
Antenna Connector	BNC		
Current Drain – Standby	0.3A		
– Rx@ rated, external 8ohm speaker	1.5A		
– Transmit (25W, max)	7A	8A	8A

Receiver	Mid Band	VHF	UHF
Frequency Stability (-30°C +60°C, +25°C)	±5 ppm	±2.5 ppm	
Sensitivity (12db Sinad)	0.35µV (12.5KHz) 0.3µV (25KHz) typical		
Intermodulation	65dB		
Adjacent Channel Selectivity	60dB (12.5KHz) 70dB (25KHz)	65dB (12.5KHz) 75dB (25KHz)	60dB (12.5KHz) 70dB (25KHz)
Spurious Rejection	70dB	75dB	70dB
Rated Audio (external audio with 4 ohm speaker)	4W internal 13W external		
Audio Distortion	3% typical		
Hum and Noise	-40dB (12.5KHz) -45dB (25KHz)	-40dB (12.5KHz) -45dB (25KHz)	-35dB (12.5KHz) -40dB (25KHz)
Audio Response	TIA603		
Conducted Spurious Emission	-57dBm < 1GHz		-47dBm > 1GHz

Transmitter	Mid Band	VHF	UHF
Frequency Stability (-30deg C +60deg C, +25deg C)	±5ppm	±2.5ppm	
Modulation Limiting	±2.5KHz (12.5KHz) ±4KHz (20KHz) ±5KHz (25KHz)		
FM Hum & Noise	-40dB (12.5KHz) -45dB (25KHz)	-40dB (12.5KHz) -45dB (25KHz)	-35dB (12.5KHz) -40dB (25KHz)
Conducted Spurious Emissions	-36dBm < 1GHz		-30dBm > 1GHz
Adjacent Channel Power	-60dB (12.5KHz)		-70dB (25KHz)
Audio Response	TIA603		
Audio Distortion	3% typical		

## MODEL NUMBERS

Name	Model Number	Signalling	Channels	Frequency	Power	Name	Model Number	Signalling	Channels	Frequency	Power
CM140	MDM50JNC9AA2_N	PL	8	VHF1 136-162MHz	1-25W	CM340	MDM50FNC9AN2_N	5 Tone	10	MB 66-88MHz	1-25W
CM140	MDM50KNC9AA2_N	PL	8	VHF2 146-174MHz	1-25W	CM340	MDM50FNC9AN2_N	5 Tone	10	VHF2 146-174MHz	1-25W
CM140	MDM50QNC9AA2_N	PL	8	UHF1 403-440MHz	1-25W	CM340	MDM50RNC9AN2_N	5 Tone	10	UHF2 438-470MHz	1-25W
CM140	MDM50RNC9AA2_N	PL	8	UHF2 438-470MHz	1-25W	CM360	MDM50JNF9AN2_N	5 Tone	100	MB 66-88MHz	1-25W
CM160	MDM50JNF9AA2_N	PL	64	VHF1 136-162MHz	-25W	CM360	MDM50JNF9AN2_N	5 Tone	100	VHF1 136-162MHz	1-25W
CM160	MDM50KNF9AA2_N	PL	64	VHF2 146-174MHz	1-25W	CM360	MDM50KNF9AN2_N	5 Tone	100	VHF2 146-174MHz	1-25W
CM160	MDM50QNF9AA2_N	PL	64	UHF1 403-440MHz	1-25W	CM360	MDM50QNF9AN2_N	5 Tone	100	UHF1 403-440MHz	1-25W
CM160	MDM50RNF9AA2_N	PL	64	UHF2 438-470MHz	1-25W	CM360	MDM50RNF9AN2_N	5 Tone	100	UHF2 438-470MHz	1-25W
CM140	MDM50KQC9AA2_N	PL	8	VHF2 146-174MHz	25-45W						
CM140	MDM50RPC9AA2_N	PL	8	UHF2 438-470MHz	25-40W						
CM160	MDM50JQF9AA2_N	PL	64	VHF1 136-162MHz	25-45W						
CM160	MDM50KQF9AA2_N	PL	64	VHF2 146-174MHz	25-45W						
CM160	MDM50QPF9AA2_N	PL	64	UHF1 403-470MHz	25-40W						
CM160	MDM50RPF9AA2_N	PL	64	UHF2 438-470MHz	25-40W						



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