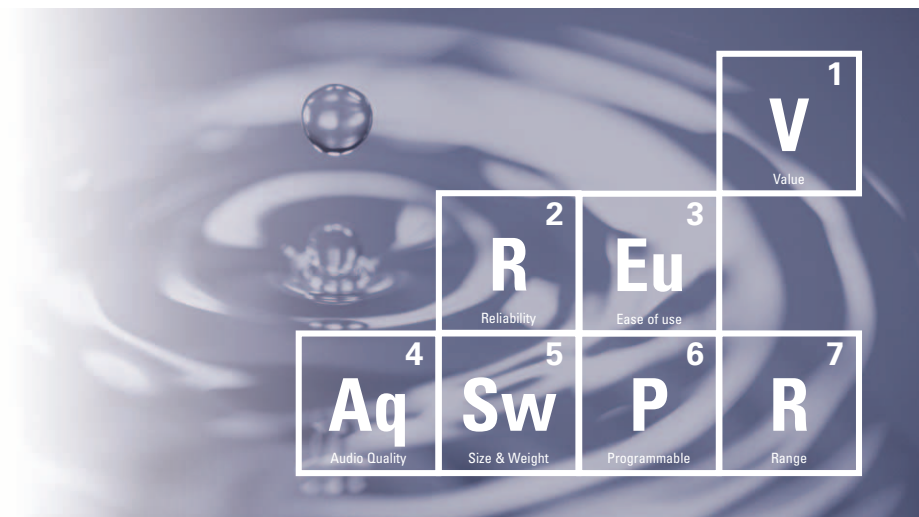


*Seven Essential Elements of Solid Two-Way Communication*

**Radius<sup>®</sup>**

**CM200<sup>™</sup>**  
**CM300<sup>™</sup>**

Mobile Series  
 Two-Way Radios and Accessories



## ***Making the Most of This Guide***

This brochure is designed to help you market Motorola's all-new CM200™ and CM300™ two-way mobile radios and accessories to your customers. Please remember the key points below and become familiar with the new mobiles' key features and capabilities.

### ***Key Points***

- Complement the recently introduced CP150™ and CP200™ portable two-way radios.
- An affordable mobile solution offered by Motorola.
- Primarily designed for new and entry-level mobile radio customers.
- Meet strict U.S. military specifications and Motorola standards for durability and reliability.
- Offer enhancements over existing Motorola entry-level mobile radios.
- Compatible with several Radius® M1225 accessories.
- Feature 4 channels (CM200) or 32 channels (CM300).
- Allow customers to choose up to 4 programmable features (CM200) or 8 (CM300).
- Can be used for desktop base station applications.
- Backed by Motorola service and a two-year warranty.
- Marketing support designed to help you go to market.

### ***Contents***

**Page 3** – Seven elements that make Motorola's mobile units unique.

**Page 4** – Enhancements that these new mobiles offer.

**Page 5** – Highlights that your customers need to know.

**Pages 6-7** – Features of the CM200.

**Pages 8-9** – Features of the CM300.

**Pages 10-11** – Radio specifications and durability test information.

**Pages 12-15** – Accessory information.

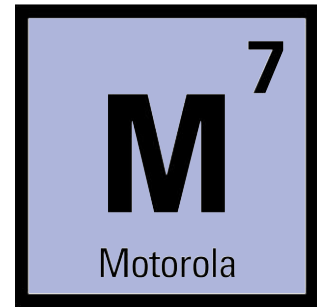
**Page 16** – Service, replacement parts and warranty information.

**Page 17** – Suggested markets for the CM200/CM300.

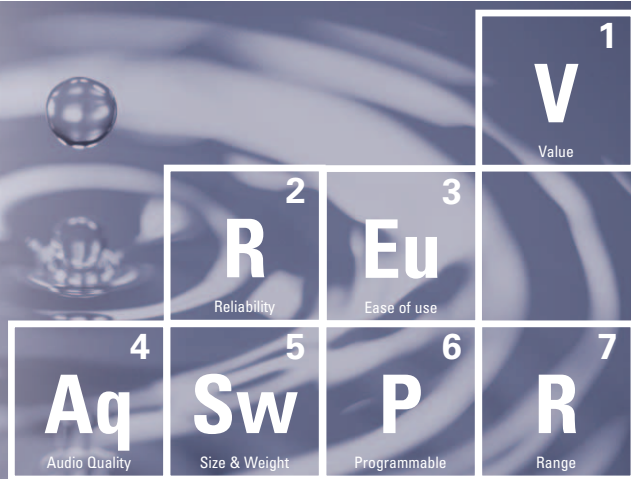
**Pages 18-19** – Marketing support for dealers selling the new mobiles.

## Motorola M7: Delivering All the Elements Your Customers Need

Whether it's a solid, a liquid or a gas, everything in the universe requires certain elements to make it what it is – including Motorola radios. We've identified seven essential elements that your customers are looking for in a mobile radio to meet their expectations and communication needs. M7 is one of our competitive advantages, as Motorola has the standards, expertise and resources to bring together all these elements.



- **Value** to ensure they get the most for their communication dollars
- **Reliability** so they can depend on their radio, even in harsh environments
- **Ease of Use** for simple operation and customization
- **Audio Quality** to get their message through loud and clear
- **Size and Weight** to provide easy and convenient installation in almost any vehicle
- **Programmable** to customize features of each radio for each user
- **Range** that lets them reach coworkers across the street or across town



Only by including all these elements can a mobile radio deliver the superb quality Motorola stands for – and the solid communication tools your customers require. And that's exactly what the newest Radius Commercial Series two-way radios deliver. The CM200 and CM300 provide users with the next level of M7.

### **Motorola – A Name Your Customers Know and Trust**

For 75 years, Motorola has been a leader in creating state-of-the-art wireless communications for you and your customers. The Radius CM200 and CM300 mobile two-way radios uphold that standard of excellence. Each radio is backed by a limited two-year\* warranty on parts and labor. So when your customers select the CM200 or CM300, they will experience the same exceptional quality they have come to expect from all Motorola products. Make sure you remind customers that Motorola's durability is unmatched in the industry.



Recipient of the 2002  
Malcolm Baldrige  
National Quality Award.

\*Radio accessories are covered by Motorola's one-year accessories warranty.



## ***New Mobiles for Many Markets***

The all-new Radius® CM200™ and CM300™ radios complete Motorola's Commercial Series line and complement the CP150™ and CP200™ portable two-way radios, so now you can offer customers portables and mobiles for many applications. In addition to vehicle installations, these new mobiles also can serve as desktop base stations or dispatch control.

The CM200 and CM300 offer enhancements over other entry-level mobiles and provide a more affordable mobile radio option, and the new mobiles are compatible with most M1225 accessories as well. Here are some advantages:

**More Channels ... More Choices.** The CM200 has 4 channels and 2 programmable buttons, and the CM300 has 32 channels and 4 programmable buttons. The CM Series offers bandwidth capabilities at 146-174MHz (VHF) and 438-470MHz (UHF).

**MDC1200 Signaling Included.** The new mobiles have it and earlier entry-level mobiles don't. MDC1200 is a proprietary Motorola signaling technology permitting the transfer of data communication at the rate of 1200 bps. Tell your customers that Motorola has MDC1200, and it's designed to help manage their fleet more efficiently.

**Quik-Call II™.** This two-tone signaling feature includes Selective Call, which allows the user to call a specific group or individual without disturbing other users and Call Alert, which can notify a specific group or individual user with an alert tone and lighted LED.

**User-Friendly Programming Software.** Dealer service technicians told us they needed software that made radio programming quick and easy. The Customer Programming Software (CPS) RVN4191 provides a number of advantages including the following:

- Programming on a variety of operating systems including compatibility with Windows XP, 2000, NT4, Me and 98 as well as USB support. Makes it easier for you to customize customers' radios to their preferred programmable features.
- Fewer tabs and fewer programming screens. Makes programming simpler because it's easier to access and more intuitive.
- The ability to work on more than one radio at a time with drag-and-drop programming features to program features from one radio to another. Means fewer repeated steps and faster programming.
- Reporting with improved customer-specific printouts available. Customer Handout reflects settings based on current programming for channel assignments, button assignments, LED operation and dealer contact information. Summary Report provides a summary of personality data, and Full Report shows all programmable settings.

### ***CM200/CM300 Standard Product Package***

- Radio with Rear-Mounted Connectors for Power, 16-Pin Accessory and Mini-U Antenna
- Low-Profile Mounting Bracket
- Standard Compact Microphone with Hang-Up Clip
- Standard Power Cable
- User Guide
- Safety Booklet
- Two-Year Radio Warranty

## Features Your Customers Will Love

Below are some features of the CM200 and CM300 that are very popular with customers.

**Price.** The CM200 and CM300 radios are an affordable solution, providing a balance between cost, functions and value for your customers. **Ideal for price-sensitive customers who still want Motorola quality.**

**Sound Quality.** It's crisp, clean and loud, according to veteran radio users. Your customers should notice, too. Improved technology means less interference and "hum." The powerful 4-watt speaker helps ensure that messages can be heard in a variety of noisy environments. **Customers who typically need these advantages include retail/delivery services, manufacturing and agriculture.**

**Range.** The CM200 and CM300 offer low- and high-power models to help satisfy your customers' communication needs.

**Rugged Reliability.** Be sure your customers know that Motorola radios meet key U.S. military specifications and pass our Accelerated Life Testing. The customer's buying decision should be based not only on price, but on overall value, including life span and replacement costs. **Customers who typically need radios that meet military standards include agriculture, manufacturing, transportation and retail/delivery services.**

**Ease of Use.** Controls are simple and straightforward for new radio users so training requirements are minimal. Large, textured controls allow for easy gripping, even when wearing gloves. Audio indicator tones sound for every button pushed, so users can keep their eyes on the road. Double (positive) and single (negative) beeps indicate the activation of or exit from a function. Audio indicators also direct your customer's attention to the radio only when action is required. **Customers who typically need ease of use advantages include retail/delivery services, hospitality, manufacturing, taxi and limousine services.**

**Programmable for Customization.** The CM200 and CM300 allow dealers to provide "basic" or "expert" software programming – all with a Microsoft® Windows® operating format. The CM200 and CM300 offer a host of programmable features to help improve range, reception and signal. These features also allow customers to perform functions such as scanning channels, operating by voice, identifying callers, sending pages and many others. You can customize the radio's buttons as shortcuts to your customer's favorite radio features, up to 2 features per programmable button. **Every customer appreciates faster and better ease of use.**

**Channel Spacing/Available Bands.** The channel bandwidth (12.5/20/25kHz) allows switchable channel spacing and increased bandwidth using CPS. **Target markets typically include taxi and limousine services, retail/delivery services, manufacturing and any businesses with a lot of radio traffic.**

**Parts.** Motorola Original® Parts are available so our radios can be fixed virtually overnight. You don't need to order parts from overseas to get customers up and operating again. Motorola can also offer rental units if needed. **Remind all customers that immediate access to the right parts is crucial to their ongoing communication needs.**

**Accessories.** Motorola has a comprehensive line of accessories to customize CM200 and CM300 radios for your customers' specific needs. See pages 12-15 in this brochure for a complete listing of accessories. Only Motorola Original Accessories and Motorola Certified Accessories are system-tested with Motorola radios to ensure optimum performance.

Price

Sound Quality

Range

Rugged Reliability

Ease of Use

Programmable for Customization

Channel Spacing

Parts

Accessories



# CM200™

Mobile Series

Two-Way Radios and Accessories



- 4 Channels
- Red/Yellow/Green LED Indicators
- 1-Character Numeric Display

- 4-Watt Front-Projecting Speaker
- Die-Cast Housing with Polycarbonate Outer Casing
- 2 Programmable Buttons (P1, P2)  
*Supports a choice of up to 4 favorite features with a short/long press*
- Up/Down Channel Selector Buttons
- Rotary On/Off/Volume Control

## CM200 Features

- 4 Channels
- Audio Indicator Tones
- VHF and UHF Frequencies
- Time-Out Timer
- Busy Channel Lockout
- Voice-Operated Transmit (requires voice-activated microphone)
- TPL Standard and Non-Standard Reverse Burst (for better compatibility with existing fleets)
- Privacy Codes (42 standard TPL codes and 84 standard DPL codes)
- Single Priority Scan allows user to listen for activity on multiple channels
- Quik-Call II™ Decode Selective Call/Call Alert
  - Selective Call: Allows receipt from a specific group or individual
  - Call Alert: Receives notification from a specific group or individual user with an alert tone and lighted LED
- MDC 1200 Push-to-Talk Identification Encode
  - Sends unique digital ID information when transmitting (PTT ID), which can be displayed on radios equipped with MDC decode
- 2-year Standard Warranty

**CM200 Programmable Features** (Customers can choose up to 4.)

- **Scan On/Off**  
*Enables/disables scan mode of operation*
- **High/Low Power**  
*Adjusts transmit power to accommodate user environment*
- **Repeater Talkaround**  
*Unit-to-unit communication, bypassing the repeater*
- **Local/Distance**  
*Local mode reduces interference from nearby radios; distance mode helps improve range*
- **Tight/Loose Squelch**  
*Tight squelch helps minimize interference from undesired weak signals; loose squelch helps weak signals to be heard*
- **Nuisance Channel Delete**  
*Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel*
- **Volume Set**  
*Sets preferred volume level for radio speaker*
- **Silent Monitor/Open Squelch**  
*Silent monitor causes radio to remain silent when there is no channel activity. Open squelch monitor causes "white noise" to be heard when there is no channel activity*
- **VOX On/Off**  
*Enables/disables voice-operated transmit functionality for the current channel*
- **Escalert**  
*Increases volume of unanswered alarm alert*



**Excellence in Design**

Great care was taken in the design process of the CM200 and CM300™ to ensure ruggedness and reliability, ease of use and functionality. Some things you'll notice about Motorola's new mobiles:

- Large controls that are easy to grip or press even when wearing gloves.
- A powerful 4-watt speaker that is forward-facing (instead of on top of the radio) for superior clarity.
- 3-color LED indicators (red, yellow, green) to show visible feedback of transmit, scan and monitor status.
- Microphone and controls located on the left, closest to driver for easy reach. All the better for drivers to keep their eyes on the road.
- Bright visual indicators that can be read at a glance.

Remind your customers that everything that goes in or on a Motorola radio is carefully considered, reviewed, designed, reviewed again and manufactured to extremely high-quality standards.

# CM300™

Mobile Series  
Two-Way Radios and Accessories



- **32 Channels**
- **8-Character Alphanumeric Display with User-Friendly Icons**  
*Assign a name to each channel for ease of use.*
- **Die-Cast Housing with Polycarbonate Outer Casing**
- **4-Watt Front-Projecting Speaker**
- **4 Programmable Buttons (P1, P2, P3, P4)**  
*Customize shortcuts for up to 8 favorite features with a short/long press (4 more than CM200™)*
- **Red/Yellow/Green LED Indicators**
- **Up/Down Channel Selector and Menu Scroll Buttons**
- **Rotary On/Off/Volume Control**

## CM300 Features

- 32 Channels
- Audio Indicator Tones
- VHF and UHF Frequencies
- Time-Out Timer
- Busy Channel Lockout
- Escalart (increases volume of unanswered alarm alert)
- Voice-Operated Transmit (requires voice-activated microphone)
- TPL Standard and Non-Standard Reverse Burst (for better compatibility with existing fleets)
- Privacy Codes (42 standard TPL codes, 84 standard DPL codes and non-standard codes)
- Menu Mode
- System Scan and Auto Scan
- Supports Up to 16 Scan Lists of Up to 16 Channels Each
- Single and Dual Priority Scan (frequently scans higher-priority channels)
- Revert Scan (radio moves automatically to last landed scan channel when exiting scan mode)
- Customizable Audio Indicator Tones
- Adjustable Backlight Intensity
- Option Board Expandability
- Quik-Call II™ Encode/Decode Selective Call/Call Alert  
Selective Call: Calls a specific group or individual  
Call Alert: Notifies a specific group or individual user with an alert tone and lighted LED
- MDC 1200 Signaling (PTT ID, Selective Radio Inhibit Decode, Radio Check Decode)  
PTT ID Encode/Decode: Sends unique digital ID information when transmitting (PTT ID), which can be displayed on radios equipped with MDC Decode  
Selective Radio Inhibit Decode: Dispatcher can remotely disable radio to prevent transmission from reaching stolen or inactive radios  
Radio Check Decode: Dispatcher can determine remotely if radio is powered on without disturbing user
- 2-year Standard Warranty



**CM300 Programmable Features** (Customers can choose up to 8.)

- **2-Channel Home Revert**  
*Returns to 1 or 2 favorite channels*
- **Volume Set**  
*Sets preferred volume level for radio speaker*
- **Silent Monitor/Open Squelch**  
*Silent monitor causes radio to remain silent when there is no channel activity; open squelch monitor causes "white noise" to be heard when there is no channel activity*
- **High/Low Power**  
*Adjusts transmit power to accommodate user environment*
- **Repeater Talkaround**  
*Unit-to-unit communication, bypassing the repeater*
- **Local/Distance**  
*Local mode reduces interference from nearby radios; distance mode helps improve range*
- **Tight/Loose Squelch**  
*Tight squelch helps minimize interference from undesired weak signals; loose squelch helps weak signals to be heard*
- **Nuisance Channel Delete**  
*Temporarily deletes a specific channel from your scan mode if you no longer want to hear activity on that channel*
- **Scan On/Off**  
*Enables/disables scan mode of operation*
- **VOX On/Off**  
*Enables/disables voice-operated transmit functionality for the current channel*
- **Escalart**  
*Increases volume of unanswered alarm alert*
- **Menu Mode**  
*Access to radio menu and to select a menu option*
- **Option Board On/Off**  
*Enables/disables option board functionality for the current personality*
- **Phone Mode**  
*Provides access to telephone interconnect through a repeater*
- **Speed Dial**  
*Initiates a phone call to a preprogrammed recipient with the press of a DTMF key (requires a DTMF keypad)*
- **Radio Call**  
*Allows a user to initiate Quik-Call II™ and/or DTMF Call Alert or Selective Call Encode from a call list*
- **Scan List Edit**  
*Allows user to add/remove channels from current scan list*
- **External Alarm**  
*Activates a warning or alert by triggering flashing headlights, a siren or a horn (requires an external alarm accessory and an accessory connector pin to be programmed for external alarm through CPS)*



**Optional Enhanced Keypad Microphone (RMN5029)**  
The CM300 radio may be ordered with an optional DTMF (Dual-Tone Multi-Frequency) microphone that is easy to use when wearing gloves and has a direct entry keypad. This keypad microphone has 3 programmable buttons below the keypad that can be programmed to conveniently activate select radio features. The keypad is used for entering user ID numbers to make a selective call to an individual or group of users or for directly accessing preprogrammed features.

## CM200™/CM300™ Mobile Two-Way Radio Specifications\*

<b>General Specifications</b>				
	VHF		UHF	
Channel Capacity	4 (CM200)	32 (CM300)	4 (CM200)	32 (CM300)
Technical RF Output				
Low Power	1-25W		1-25W	
High Power	25-45W		25-40W	
Frequency	146-174MHz		438-470MHz	
Dimensions ( H * W * L )	1.73" x 6.67" x 4.64" (44mm x 169mm x 118mm)		1.73" x 6.67" x 4.64" (44mm x 169mm x 118mm)	
Weight (radio only)	2.25 lbs (1.02 Kg)		2.25 lbs (1.02 Kg)	
Current Drain: Standby	0.3A		0.3A	
Rx@ rated, external 8 ohm speaker	1.5A		1.5A	
Transmit	7A (25W)	9.5A (45W)	8A (25W)	9A (40W)
FCC Description	AZ492FT3805 (25W) ABZ99FT3046 (45W)		AZ492FT4856 (25W) ABZ99FT4048 (40W)	
<b>Receiver</b>				
	VHF		UHF	
Frequencies	146-174MHz		438-470MHz	
Channel Spacing	12.5/20/25kHz		12.5/20/25kHz	
Frequency Stability (-30 C + 60 C, +25 C)	+/-2.5ppm		+/-2.5ppm	
Sensitivity (12db Sinad)	0.35µV (12.5kHz) 0.3µV (25kHz) typical		0.35µV (12.5kHz) 0.3µV (25kHz) typical	
Intermodulation	65dB (12.5kHz)	75dB (25kHz)	60dB (12.5kHz)	70dB (25kHz)
Adjacent Channel Selectivity	65dB (12.5kHz)	75dB (25kHz)	60dB (12.5kHz)	70dB (25kHz)
Spurious Rejection	75dB		70dB	
Rated Audio (extended audio with 4 ohm speaker)	4W internal 13W external		4W internal 13W external	
Audio Distortion @ Rated Audio	3% typical		3% typical	
Hum and Noise	-40 dB (12.5kHz) -45 dB (25kHz)		-35 dB (12.5kHz) -40 dB (25kHz)	
Audio Response	TIA603 & ETS300		TIA603 & ETS300	
Conducted Spurious Emission	-57 dBm < 1GHz -47 dBm > 1GHz		-57 dBm < 1GHz -47 dBm > 1GHz	
<b>Transmitter</b>				
	VHF		UHF	
Frequencies	146-174MHz		438-470MHz	
Channel Spacing	12.5/20/25kHz		12.5/20/25kHz	
Frequency Stability (-30 C + 60 C, +25 C)	+/-2.5ppm		+/-2.5ppm	
Modulation Limiting	+/-2.5kHz (12.5kHz) +/-4kHz (20kHz) +/-5kHz (25kHz)		+/-2.5kHz (12.5kHz) +/-4kHz (20kHz) +/-5kHz (25kHz)	
FM Hum and Noise	-40 dB (12.5kHz) -45 dB (25kHz)		-35 dB (12.5kHz) -40 dB (25kHz)	
Conducted/Radiated Power	-36 dBm < 1GHz -30 dBm > 1GHz		-36 dBm < 1GHz -30 dBm > 1GHz	
Adjacent Channel Power	-60 dB (12.5kHz) -70 dB (25kHz)		-60 dB (12.5kHz) -70 dB (25kHz)	
Audio Response	TIA603		TIA603	
Audio Distortion	3% typical		3% typical	
FM Modulation	11K0F3 (12.5kHz) 16K0F3E (25kHz)		11K0F3 (12.5kHz) 16K0F3E (25kHz)	

\*All specifications subject to change without notice.

## CM200/CM300 Mobile Military Standards

Applicable MIL - STD	810C		810D		810E	
	Methods	Procedures	Methods	Procedures	Methods	Procedures
Temperature Shock	503.1	I	503.2	I	503.3	I
Solar Radiation	505.1	I	505.2	I	505.3	I
Rain	506.1	I	506.2	I	506.3	I
Salt Fog	509.1	I (48 Hours)	509.2	I (48 Hours)	509.3	I (48 Hours)
Dust	510.1	I	510.2	I	510.3	I
Vibration	—	—	514.3	I. Cat. 1	514.4	I. Cat. 1
Shock	516.2	I, III	516.3	I, V	516.4	I, V

### Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

### Environmental Specifications

Operating Temperature	- 30 C to + 60 C
Storage Temperature	- 40 C to + 85 C
Thermal Shock	- 40 C to + 80 C
Humidity	95%RH @8Hr
Water Intrusion	IP 54
Packing Test	Impact test

### Exceptional Durability

There's a reason why Motorola two-way radios are built to last. Motorola's rugged and reliable radios, including the Radius® CM200 and CM300, undergo rigorous testing in the design process. We use U.S. Military Standards and Accelerated Life Testing, so your customers can be assured Motorola radios will hold up under demanding conditions. These tests are designed to simulate very harsh environments, including:

**Rain** – Steady rainfall and wind for 30 minutes on every surface. Ideal for agriculture because you can't stop just because of the weather when there's work to be done.

**Salt Fog** – 48 hours of exposure to an atomized salt solution. Ideal for manufacturing and transportation customers working near oceans or around winter salt applications because salt can corrode ordinary radios.

**Dust** – 6 hours of blowing dust on all surfaces. Ideal for agriculture, manufacturing and other customers because dust can get everywhere when you're on the road.

**Vibration** – Up to 9 hours of exposure to vibration that simulates the rigors a radio could undergo while being transported. Ideal for retail/delivery services, taxi and limousine services and anyone else who wants his or her two-way radio to last a long time.

**Shock** – 18 shocks with a minimum G force of 40 Gs each. Ideal for agriculture, manufacturing, transportation, retail/delivery services and anyone who drives frequently. Because potholes, bumps and gullies are everywhere and show no mercy.

## CM200™/CM300™ Radio Accessories

A variety of Motorola Original® and Certified Accessories are available for the CM200 and CM300 radios to expand the capabilities of the radios and create a customized communication solution for your customers' businesses. Motorola Original® Accessories carry a one-year limited warranty. Several M1225 accessories are compatible with the CM200 and CM300.

- **Audio Accessories** – microphones and speakers  
*Make it easy to hear and be heard*
- **Hands-Free Accessories**  
*Improve operating convenience and safety*
- **Desktop Base Station Accessories** – power supplies, stands  
*Set up an efficient, centralized base station*
- **Mounting Accessories**  
*Customize the mobile's mounting for added convenience*
- **Antenna Accessories**  
*Transmission and reception is everything*
- **Mobile Data Accessories**  
*Information is power with mobile data and GPS*
- **Public Address Accessories**  
*Get the word out to everyone in the immediate area*
- **Alarm Accessories**  
*Provide a warning or an alert*
- **Installation Accessories**  
*Make sure your customers' radios are installed properly*





## CM200-CM300

### Mobile Accessories

<i>Part Number</i>	<i>Product Name</i>	<i>Benefits</i>
<b>MICROPHONE ACCESSORIES</b>		
HMN3413A	Compact Palm Microphone with 7 ft. Coil Cord with Clip	Ships standard with CM200 and CM300 radios.
HMN1035C	Heavy-Duty Palm Microphone with 10.5 ft. Coil Cord	Durable microphone is larger and designed for easy use for end users wearing gloves.
RMN5029A	Enhanced Keypad Microphone with 7 ft. Coil Cord with Clip	The enhanced keypad microphone features a backlit 12-digit DTMF keypad that generates the standard tones needed by users to access telephone communication systems through a repeater equipped with telephone interconnect.
HMN3596A	Compact Palm Microphone with 7 ft. Coil Cord	Replacement compact microphone.
AAREX4617A	Telephone-Style Handset	Telephone-style handset is ideal for those who want the ability to conduct private conversation; users can transmit and receive messages through this ergonomically designed, easy-to-hold handset. Includes cup and hardware.
HLN9073B	Microphone Hang-Up Clip	Compatible with all Motorola microphones. Regular hard mounted clip – installation required. Mounts in vehicle to secure mobile microphone.
HLN9414A	Universal Hang-Up Clip	Compatible with all Motorola microphones. No installation required.
<b>HANDS-FREE ACCESSORIES</b>		
AARMN4027A	Visor Microphone	Visor microphone for use with external push-to-talk accessories. Microphone mounts to vehicle's visor for convenient hands-free operation of the radio. Provides wind noise reduction. Must be used in conjunction with other hands-free push-to-talk accessories such as the pushbutton with push-to-talk, foot switch with push-to-talk or gooseneck mount with push-to-talk.
RLN4856A	Foot Switch with Push-to-Talk	Foot switch with push-to-talk feature provides hands-free operation of radio in the vehicle, allowing the user to transmit messages without using a mobile microphone. Foot switch mounts to the vehicle's floor and must be used in conjunction with the visor microphone (AARMN4027A).
RLN4857A	Pushbutton with Push-to-Talk	Pushbutton with push-to-talk feature provides hands-free operation of a radio in a vehicle, allowing the user to transmit messages without using a mobile microphone. Must be used in conjunction with the visor microphone (AARMN4027A). Push-to-talk button can be held in the hands or mounted in the vehicle with touch fasteners.
RLN4858A	Gooseneck Mount with Push-to-Talk	Gooseneck mount with push-to-talk feature provides hands-free operation of a radio in a vehicle, allowing the user to transmit messages without using a mobile microphone. The gooseneck push-to-talk button mounts to the steering wheel column and must be used in conjunction with the visor microphone (AARMN4027A).
RLN4836AR	Emergency Foot Switch	Emergency foot switch enables the user to notify the base station quickly and discreetly that he or she is in an emergency situation. Pressing the foot switch sends a signal to the base station and activates the microphone to allow communication with the base station.

**CM200-CM300****Mobile Accessories**

<i>Part Number</i>	<i>Product Name</i>	<i>Benefits</i>
<b>EXTERNAL SPEAKERS AND PUBLIC ADDRESS SYSTEMS</b>		
HSN8145B	External 7.5 Watt Speaker	Speaker offers a high level of radio volume output which can be beneficial for users in high-noise environments.
RSN4001A	External 13 Watt Speaker	For extremely noisy environments, this speaker offers a higher level of radio volume output so users can communicate.
RLN5288A	Public Address Kit	Includes two cables for mobile connection to public address box and speaker cables. Requires HSN1000B speaker.
HSN1000B	6 Watt Amplified External Speaker for Public Address Audio	Required for use with RLN5288A, Public Address Kit.
HKN9324AR	15' Public Address/Speaker Cable	One cable is required per speaker.
<b>MOUNTING ACCESSORIES</b>		
GLN7324A	Low-Profile Mounting Bracket	The low-profile mounting bracket is used to keep the radio tucked up under the dash. Mounting bracket can also be positioned for floor mounting of a radio.
GLN7317A	High-Profile Mounting Bracket	The high-profile mounting bracket is used to keep the radio tucked up under the dash. It offers more clearance between the dash and the radio than does the low-profile bracket, but with added room to allow the user to tilt the radio for a better view when needed. In addition, it can be positioned for floor mounting of the radio.
HLN9227A	8" Gooseneck Mounting Bracket	The gooseneck mounting bracket is perfect for a range of mounting challenges. The gooseneck raises the mobile for better viewing of display. Additionally, the user can adjust the bottom "foot" to mount on a vertical surface when no other convenient location is available.
RLN4779A	Key Lock Mount Bracket	Key lock mount bracket allows the mobile to be mounted and locked and gives radio users extra protection from theft by requiring use of a key to lock/unlock the radio from its position in the mounting bracket.
HLN8097A	Removable Slide Mount	Removable slide mount is ideal if users frequently move the radio from one vehicle to another. The radio easily slips in and out of the slide mount so users can take it with them when they leave the vehicle.
<b>DESKTOP BASE STATION ACCESSORIES</b>		
HPN4002B	Power Supply and Cable (1-25W models)	1-25 watt power supply for use with low-power radios in order to provide power for mobiles in a desktop environment.
HPN4001B	Power Supply and Cable (25-60W models)	25-60 watt power supply for use with high-power radios in order to provide power for mobiles in a desktop environment.
HMN3000B	Desktop Microphone, Black	Black desktop microphone makes transmissions easy when the mobile radio is being used from a desktop because the microphone and push-to-talk button are larger. Microphone can help expedite transmissions because the user doesn't have to keep picking up the mobile microphone.
HKN4139A	Power Cable of Low-Power Control Stations 12V (1-25W Models)	
HKN9455A	Power Cable of High-Power Control Stations 12V (25-60W Models)	
RLN5390A	Desktop Tray with Speaker	Ideal for securing the mobile in place in a desktop environment. Includes speaker for increased volume when receiving calls in high-noise areas.
RLN5391A	Desktop Tray Without Speaker	Ideal for securing the mobile in place in a desktop environment.
<b>MISCELLANEOUS</b>		
HLN9328C	External Alarm Relay Cable – horn and lights	
GLN7282A	Alarm Buzzer Kit	

## CM200-CM300

### Mobile Accessories

Part Number	Product Name	Benefits
<b>INSTALLATION ACCESSORIES</b>		
HKN4137AR	12V, 1-45W Low-Power Cable	Cable used to connect the battery to the radio chassis.
HKN4191B	12V, 40-60W High-Power Cable	Cable used to connect the battery to the radio chassis.
HLN9242A	16-Pin Accessory Kit with Expanded Connector	Kit allows existing 16-pin connector accessories to be modified for enhanced connector reliability when used with CM Series mobiles. Includes 9 wires with lugs, 1 connector housing, 16 crimping terminals, 2 tie straps and 1 extraction tool.
HKN9327BR	Ignition Switch Cable with Housing Connector	Cable is used to connect the battery to the radio chassis and is an option for mobile radio users who want their mobiles to turn on when they start the ignition. Requires HLN9242.

### ANTENNAS

VHF	
HAD4006A	VHF 136-144MHz, 1/4 Wave Roof Mount
HAD4007A	VHF 144-152MHz, 1/4 Wave Roof Mount
HAD4008A	VHF 150.8-162MHz, 1/4 Wave Roof Mount
HAD4009A	VHF 162-174MHz, 1/4 Wave Roof Mount
HAD4014A	VHF 140-174MHz, 3dB Gain Roof Mount
RAD4000A	VHF Antenna Only, 140-174Mhz
RAD4000AMB	VHF 140-174MHz, 3dB Gain Magnetic Mount Antenna
UHF	
HAE4003A	UHF 450-470MHz, 1/4 Wave Roof Mount
RAE4004ARB	UHF 450-470MHz, 5dB Gain Roof Mount
RAE4004AMB	UHF 440-470MHz, 5dB Gain Magnetic Mount Antenna
TAE6053A	UHF 430-450Mhz 1/4 Wave Roof Mount Antenna

For optimum range and quality, it is important to match the CM Series mobile radio's frequency with the proper Motorola Original<sup>®</sup> Antenna. Every unit needs one. Six VHF and seven UHF models are available for the various CM200/CM300 configurations. These are available as standard 1/4 wave models or can include 3dB, 3.5dB or 5dB audio signal gain. A permanent roof mount antenna is the most reliable and secure option. However, some customers who periodically remove the radio from their vehicles may prefer a magnetic mount antenna.

### MOBILE DATA

RDN7364A	Base Radio Channel Controller
RDN7367A	Mobile Display Terminal with GPS
RDN7368A	Mobile Display Terminal
RDN7369A	Stand-Alone Modem with GPS
RDN7372A	Fixed Mount GPS Active Antenna
RDN7373A	Mobile Printer
RDN7374A	Programming Software
RDN7375A	Magnetic Mount GPS Antenna
RDN7377A	MAPS (US) Regional
RDN7378A	AVL Messaging Status Software
RDN7380A	Mobile Programming Hardware
RDN7738A	Serial Breakout Unit
RDN7739A	3 ft. Flying Lead Cable
RDN7740A	15 ft. Flying Lead Cable

Mobile data accessories greatly expand the function and versatility of the CM Series radios. Fleet dispatchers and drivers can benefit from several Global Positioning System options that can locate and map traveling vehicles. All of the necessary hardware and software is available from Motorola to truly customize the CM200 or CM300 user's capabilities.

## Service, Replacement Parts & Warranty Information

Motorola stands firmly behind its products. Whether it's warranty, availability of parts and service, support of dealer-provided service or other offerings, we're here to help you succeed.

Ensure your customers' CM200™ and CM300™ radios are in peak operating condition with Express Service Plus (ESP). ESP is an optional service plan available for depot service coverage for a period of 1 or 2 years beyond the original Motorola warranty.

These plans are available on the Motorola CM200 and CM300 radios for an additional fee and are available for purchase at the time of an equipment order or prior to the expiration of the standard commercial warranty period (two years for parts and labor on Motorola commercial radios). Service is provided by the Radio Support Center in Rockford, IL.

Your customers depend on Motorola products for reliable communication. When their equipment needs service, you can rely on Motorola factory-trained service personnel to help ensure their equipment remains within factory operating specifications.

### Radio Assembly – Replacement Parts

Item	Motorola Part Number	Description
1	1589224U01	Top Cover
2	3289329U01	Main Seal
3	2689338U01	Main Shield
4	2689337U01	PA Shield
5	4289561U01	RF Connector Clip
6	0310943J12	Screw
7	0789352U01	PA Clip
8	Refer to Basic Service Manual	VHF Main Board UHF Main Board
9 & 10	5802810C15	Connector Jack and O-ring
11	0189484U01	Power Cable Assembly
12	3202607Y01	Cap, Accessory Connector
13	2789223U01	Chassis

### Radio Control Head – Replacement Parts

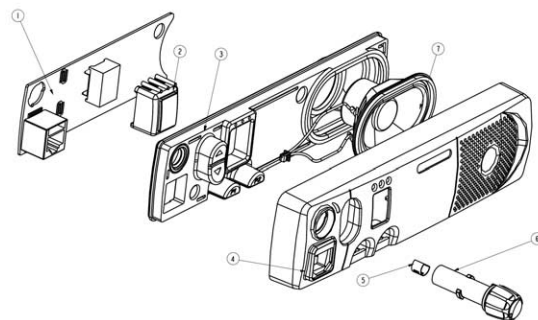
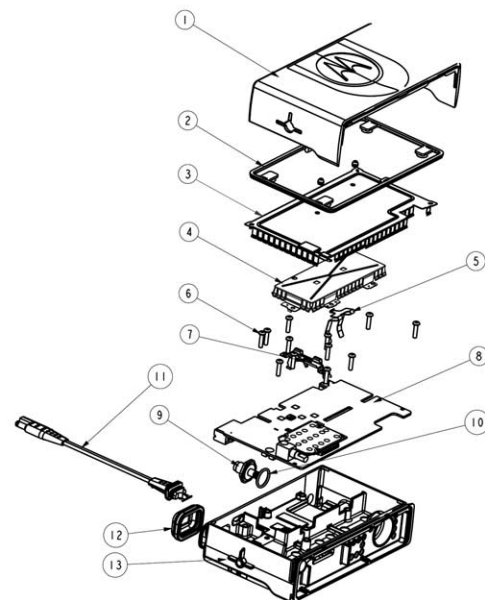
Item	Motorola Part Number	Description
1	8488998U01	Control Head Board
2	68189338U01	Lens
3	7589330U01	Keypad
4	1589332U01	Control Head Plastic
5	Part of Item 6	Knob Spring
6	3689331U02	Knob
7	5005156Z02	Speaker
8	3089305U01	Flat Cable (not shown)

### Service Aids

Motorola Part Number	Description
8180384N64	Housing Eliminator
FKN8096A	Flash/Data Adapter Cable
FKN8113A	Adapter Cable
AARKN4081B	Programming Cable
AARKN4083A	Program Test Cable
RLN4008E	Rib Box (PC to Radio)
RLN4460C	Test Box

### RSS/CPS

Motorola Part Number	Description
RVN4191C (CPS R01.02, Tuner R02.08.00)	RSS/CPS





## CM200/CM300 Target Radio Markets

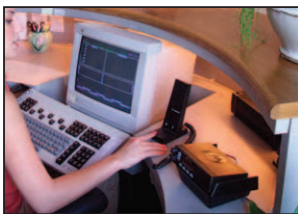
The CM200 and CM300 were designed with 2 primary customer groups in mind: users who are new to two-way mobile radios and those who are price-sensitive. The new commercial mobile radios are ideal for use by smaller organizations. Recommended CM200/CM300 markets include, but are not limited to, the following:



### Agriculture

- Small size makes mounting easy in a tractor, combine, pickup truck or almost any farm vehicle
- Enables cohesive coordination of agricultural tasks, as well as emergency response, if necessary
- Keeps the work flowing no matter what the weather

**Recommended accessories:** universal hang-up clip, heavy-duty microphone, hands-free audio accessories



### Hospitality

- Improves customer service with immediate communication between base station, portables and mobiles
- Ideal for weather extremes on the golf course, ski hill or seaside resort
- Small size makes installation easy in almost any vehicle, even a golf cart

**Recommended accessories:** public address kit, desktop base station accessories



### Manufacturing

- Communicate effectively in noisy environments with powerful 4-watt speaker and improved audio
- Small size and light weight make mounting easy in forklifts, delivery trucks and other vehicles
- Perfect for control station applications to communicate with portables on the floor and mobiles on the road

**Recommended accessories:** gooseneck mounting bracket, external speaker, universal hang-up clip, desk microphone and desktop base station accessories



### Retail/Delivery Services

- Quickly and effectively coordinate shipping to maximize efficiency and customer service
- Handle order changes and prioritize delivery schedules at any time
- Avoid miscommunication or frequent repeated messages with powerful, clear audio

**Recommended accessories:** gooseneck mounting bracket, universal hang-up clip and mobile data accessories



### Taxi and Limousine Services

- Quickly and easily alert drivers regarding passenger pickup
- Helps drivers keep their eyes on the road with audio indicators that “beep” for features and functions, including channel changes
- Durable design stands up to potholes and rough roads

**Recommended accessories:** mobile data accessories and telephone-style handset



### Transportation/Fleet

- Conveniently ensures that all drivers are clear on their responsibilities and headed in the right direction
- Change routes or priorities at a moment's notice with the touch of a button
- Provides immediate link when drivers need assistance
- Economic solution for school transportation fleets

**Recommended accessories:** magnetic mount antenna, universal hang-up clip and mobile data accessories

## Marketing Support

Marketing materials for the CM200™ and CM300™ are available to help present and promote these new radios to your customers. The marketing materials include a consumer brochure, sell sheets, product overview, sales presentation, photography and a variety of marketing programs to support the CM Series launch.

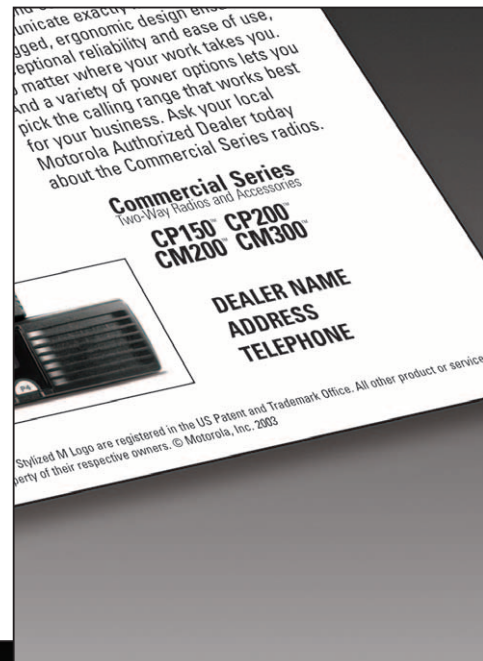
## Sales Tools

**Consumer Brochure** – The consumer brochure presents and explains the CM Series features and benefits to customers that have never used two-way radios, as well as existing customers that are looking for a new radio communication system. The brochure has space reserved on the back for you to include a dealer label. Brochures can be ordered from the Literature Distribution Center (LDC) via MOL. Literature number: MD-EUCM200/300

**Sell Sheets** – We developed 1-sided 8-1/2" x 11" sell sheets featuring the CM200 and CM300 radios and a second sell sheet featuring the CM Series radios along with the CP150™ and CP200™ radios for customers who could use portables and mobile radios. These sell sheets are included on your CD-ROM for easy printing.

**Sales Presentation** – This comprehensive PowerPoint® presentation is ideal to share with customers and may be presented electronically or by using the laminated flip chart presentation. Four-color slides present the radios and point out all the features and benefits. The electronic version of this presentation is included on your CD-ROM and has notes pages to help you augment your presentation with details of each feature and how these benefit the customer.

**Marketing CD-ROM** – We've also included a CD-ROM with print advertising artwork to place local ads customized with your dealership contact information. For further customization, we've included logos, a comprehensive assortment of radio images, application images and accessory images. There is also a training presentation in Flash PowerPoint with a tutorial that runs automatically when you click start.



## Photo Resources

Need additional photography for the CM200 or CM300 to support your marketing efforts or camera-ready advertisements? Motorola makes it easy. We have provided you with a CD-ROM of ads and photos. Or, check the photos out online. Simply visit <http://www.lincolncreative.com/MotoPhoto>, and select the photos that best fit your needs. Please note that a broadband Internet connection (rather than a dial-up line) is recommended for speedy downloading.



## Marketing Programs

Don't forget that our *Motorola Solutions* newsletter and the all-new Power2Connect direct mailers were developed with dealers in mind. We want to make it easy for you to reach your customers with the appropriate marketing message to help increase sales and improve customer relationships and satisfaction. These marketing programs are available for U.S. dealers only.

**Motorola Solutions:** The January edition of *Motorola Solutions* will feature the new CM Series radio in several vertical markets. Visit [www.motorolasolutions.biz](http://www.motorolasolutions.biz) for more information.

**Power2Connect:** A new Power2Connect campaign will be coming soon, featuring the new CM Series mobiles. Watch your mail and MOL for information on when these materials will be available.

## Literature Resources

The following literature is available to order through the LDC via MOL. Log on at <https://www.motorola.com/businessonline> in the Resource Center, under Product Information>Literature>Literature Order Forms. Dealer Announcement Kit: MD-CMLAUNCHKIT  
 Dealer Brochure: MD-DLRCM200/CM300  
 Consumer Brochure: MD-EUCM200/300  
 Marketing CD-ROM: MD-CM200/CM300CD



Actual literature may vary.



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<https://www.motorola.com/businessonline>

MD-DLRCM200/CM300

Motorola's Commercial, Government and Industrial Solutions Sector (CGISS) is a recipient of the prestigious 2002 Malcolm Baldrige National Quality Award, in recognition of its commitment to performance excellence and quality achievement.