



# CP150™ CP200™

Commercial Series  
Two-Way Radios and Accessories



Seven Essential Elements of  
Solid Two-Way Communication

1  
V  
Value



Radius CP150

		<b>V</b> <sup>1</sup> Value
<b>R</b> <sup>2</sup> Reliability	<b>Eu</b> <sup>3</sup> Ease of use	
<b>Aq</b> <sup>4</sup> Audio quality	<b>Sw</b> <sup>5</sup> Size & weight	
<b>Bl</b> <sup>6</sup> Battery life	<b>R</b> <sup>7</sup> Range	

## Motorola M7: Delivering All the Elements You Need to Succeed

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 Motorola radios must have to meet your communication needs:

- **Value** to ensure you get the most for your communication dollars
- **Reliability** so you can depend on your radio, even in harsh environments
- **Ease of Use** for simple operation and customization
- **Audio Quality** to get your message through loud and clear
- **Size and Weight** so sleek and lightweight you can take your radio almost anywhere
- **Battery Life** that gives you the power to talk as long as you need
- **Range** that lets you reach coworkers across the street or across town

Only by including all of these elements can a radio deliver the superior quality Motorola stands for—and the solid communication tools you require. And that's exactly what the newest Radius Commercial Series two-way radios deliver. It's the next generation of Motorola communication.



### The CP150 and CP200 Radios: High Performance at a Competitive Price

The new Radius CP150 and CP200 portable two-way radios deliver the quality features you want at a very competitive price. To provide the range that's best for your business, the CP150 radio is available in 2W UHF and VHF models. The CP200 radio is available in both 4W UHF and 5W VHF models. Powerful 500 mW audio output penetrates noisy environments, providing clear, crisp audio at any volume. A lightweight, ergonomic design makes these radios comfortable to carry and operate, even while wearing gloves. A range of battery choices along with rapid recharging capabilities help ensure your radio is ready when you are. Programmable option buttons make it easy to customize your radio with your choice of features. The CP200 radio offers the increased communication flexibility of push-to-talk radio ID and selective call.

### Exceptional Durability

Rugged and reliable, the CP150 and CP200 radios undergo rigorous testing in the design process using U.S. Military Standards—so you can rest assured they will hold up under demanding conditions. These tests are designed to simulate the very harshest environments, including:

**Blowing Rain**—steady rainfall and wind for 30 minutes on every surface

**Salt Fog**—48 hours of exposure to an atomized salt solution

**Blowing Dust**—six hours of blowing dust on all surfaces

**Vibration**—up to nine hours of exposure to vibration that simulates the rigors that a radio could undergo while being carried or transported

**Shock**—18 shocks with a minimum G force of 40 G each

**Temperature Storage**—multiple hours of exposure to temperatures as low as -70° F followed by multiple hours of exposure to temperatures as high as 160° F

### Motorola—A Name You Know and Trust

For more than 75 years, Motorola has been a leader in creating state-of-the-art wireless communications for people like you. The CP150 and CP200 two-way radios uphold that superior standard. And each radio is backed by a limited two-year\* warranty on parts and labor. So when you select the CP150 or CP200 portable, you'll experience the same exceptional quality you've come to expect from all Motorola products.

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

Reliability

Ease of use

2

3

# CP150/CP200

## Commercial Series



Radius CP200

### Radio Features

4/16 Conventional Channels

#### Large Rotary Channel Selector

Changes channels quickly and easily

#### Rotary On/Off and Volume Control

#### Tricolor LED

Indicates radio status and battery levels

#### Accessory Connector

Convenient access for audio accessories

#### 3" Spring Action Belt Clip

Attaches radio firmly to belt

#### Rugged, Die-Cast Chassis

With polycarbonate housing for greater protection

#### Large, Textured Push-to-Talk Button

Easy to find and use, even when wearing gloves

#### Two Programmable Option Buttons

Supports your choice of up to four product features

#### Battery Latch Lock

Secures battery

In addition to the above features, the CP200 portable radio offers the following signaling features:

- **Quik-Call II™ Selective Call/Call Alert**—Lets individuals or groups receive selective pages via radio tones.
- **MDC Push-to-Talk Radio ID**—Sends unique digital ID information when transmitting.

Audio quality

Size & weight

6  
BI

Battery life

7  
R

Range

4

AQ

5

SW

# CP150/CP200 Radio Vertical Markets

## Education

Managing administration or security on large campuses requires keeping in touch with your colleagues. The CP150 and CP200 portable radios give you easy contact with the colleagues who can help you keep everything under control.



## Hospitality

Whether you're coordinating staff for a conference or requesting a quick room change for a last-minute guest, you need communication that won't slow you down. The lightweight, ergonomically designed CP150 and CP200 portable radios are comfortable enough to use and carry all day.

## Retail

In the retailing industry, great customer service depends on fast response. The CP150 and CP200 radios let you connect at the touch of a button with store or stockroom personnel to get the information you need—when you need it.



## Security

When an alarm signals illegal entry into the building you're securing, you don't have a moment to lose. The CP150 and CP200 radios give you the up-to-the-minute communication you need to alert coworkers or request backup at the touch of a button.





## CP150/CP200 Radio Accessories

Choose from the many Motorola Original Accessories available for the CP150 and CP200 radios to expand the capabilities of your radio and create a customized communication solution for your business.

### Ultra-Light Headset with Boom Microphone—RLN5411

Light and discreet, this headset provides high quality radio communication and all day comfort. Its convenient push-to-talk feature, adjustable boom microphone, and sleek design make it ideal for employees dealing directly with customers.

### Lightweight Headset—RMN4016

This lightweight single muff, adjustable headset features a swivel boom microphone and in-line push-to-talk button. It's ideal for moderate noise environments.

### Remote Speaker Microphone—HMN9030

This water-resistant compact unit allows the user to talk and listen without removing the radio from the belt or carry case. It features a coiled cord and a swivel clothing clip.

### Leather Carry Case with Swivel—RLN5385

This case protects your radio in even the most demanding environments. Its swivel design allows the case to move to accommodate the user's position, while remaining securely attached to the user's belt.

### Rapid Rate Desktop Charger—WPLN4138

Lightweight and compact, this unit will charge your NiCd or Li-ion battery within two hours. Batteries can be charged while attached to the radio or on their own, allowing the user to charge spare batteries.

### Extended Battery, 1800 mAh Li-ion—NNTN4497

This optional battery provides up to 17 hours of CP150 radio talk time or up to 14 hours of CP200 radio talk time. Lightweight and environmentally safe, this battery offers built-in circuit protection.



In addition to the above accessories, Motorola offers a variety of antenna options, such as the UHF Heliflex Stubby Antenna (NAE6522) shown throughout this brochure and VHF Stubby Antenna (HAD9742/HAD9743). For complete accessory availability, contact your Motorola Authorized Dealer.

CP150/CP200  
Radio Specifications



GENERAL SPECIFICATIONS				
VHF		UHF		
Frequency:	146-174 MHz		438-470 MHz	
Channel Capacity:	4 or 16 Channels		4 or 16 Channels	
Power Supply:	7.5 Volts ± 20%		7.5 Volts ± 20%	
Dimensions with both High Capacity NiCd and Li-ion Battery:	127.5mm H x 61.5mm W x 45mm D (5.0" H x 2.4" W x 1.75" D)		127.5mm H x 61.5mm W x 45mm D (5.0" H x 2.4" W x 1.75" D)	
Weight with High Capacity Li-ion Battery:	370g (13.04 oz.)		370g (13.04 oz.)	
with High Capacity NiCd Battery:	425g (14.98 oz.)		425g (14.98 oz.)	
Average Battery Life @ 5-5-90 Duty Cycle	2W	5W	2W	4W
High Capacity NiCd Battery:	9 Hrs.	8 Hrs.	9 Hrs.	8 Hrs.
High Capacity Li-ion Battery:	17 Hrs.	14 Hrs.	17 Hrs.	14 Hrs.
FCC Designation:	AB299FT3045		AB299FT4056	

RECEIVER SPECIFICATIONS				
VHF 12.5 kHz		VHF 20/25/30 kHz		UHF 12.5 kHz
Frequency:		146-174 MHz		438-470 MHz
Sensitivity 12dB EIA SINAD:		0.25 µV (typical)		0.25 µV (typical)
Adjacent Channel Selectivity:		-65 dB	-70 dB	-60 dB
Intermodulation:		-70 dB		-70 dB
Frequency Stability (-30° C to +60° C):		0.00025%		0.00025%
Spur Rejection:		-75 dB		-75 dB
Image and 1/2 I-F Rejection:		-70 dB		-70 dB
Audio Output @ < 5% Distortion:		500 mW		500 mW

TRANSMITTER SPECIFICATIONS				
VHF		VHF	UHF	
RF Output:		Low 2W	High 5W	Low 2W
Frequency:		146-174 MHz		438-470 MHz
Channel Spacing:		12.5/20/25 kHz		12.5/20/25 kHz
Frequency Stability (-30° C to +60° C):		0.00025%		0.00025%
Spurs/Harmonics:		-36 dBm < 1 GHz		-36 dBm < 1 GHz
Audio Response: (from 6 dB/oct. Preemphasis, 300 to 3000Hz)		+1, -3 dB		+1, -3 dB
Audio Distortion: @ 1000 Hz, 60% Rated Max. Dev.		< 3%		< 3%
FM Noise:		-40 dB (12.5 kHz)		-40 dB (12.5 kHz)
FCC Modulation: 20/25/30 kHz 12.5 kHz		16K0F3E 11K0F3E		16K0F3E 11K0F3E

PORTABLE MILITARY STANDARDS 810 C, D, E, & F								
Applicable MIL-STD	810C		810D		810E		810F	
	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2	500.4	1
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2	501.4	1,2
Low Temperature	502.1	1	502.2	1,2	502.3	1,2	501.4	1,2
Temperature Shock	503.1	1	503.2	1	503.3	1	503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1
Rain	506.1	1,2	506.2	1,2	506.3	1,2	506.4	1
Humidity	507.1	2	507.2	2,3	507.3	2,3	507.4	3
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	1
Dust	510.1	1	510.2	1	510.3	1	510.4	1
Vibration	514.2	8,10	514.3	1	514.4	1	514.5	1
Shock	516.2	1,2,5	516.3	1,4	516.4	1,4	516.5	1

Applicable to UHF and VHF Specifications.  
All specifications are subject to change without notice.

Reliability

Ease of use

Battery life

Range

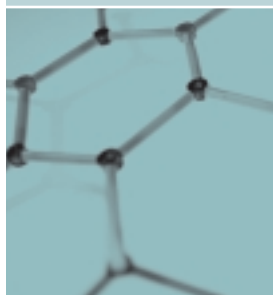
4

5

										He Helium
				10.8 5 B Boron	12.0 6 C Carbon	14.0 7 N Nitrogen	16.0 8 O Oxygen	19.0 9 F Fluorine	20.2 10 Ne Neon	
				27.0 13 Al Aluminum	28.1 14 Si Silicon	31.0 15 P Phosphorus	32.1 16 S Sulfur	35.5 17 Cl Chlorine	40.0 18 Ar Argon	
27 Co Cobalt	58.7 28 Ni Nickel	63.5 29 Cu Copper	65.4 30 Zn Zinc	69.7 31 Ga Gallium	72.6 32 Ge Germanium	74.9 33 As Arsenic	79.0 34 Se Selenium	79.9 35 Br Bromine	83.8 36 Kr Krypton	
101.1 45 Rh Rhodium	106.4 46 Pd Palladium	107.9 47 Ag Silver	112.4 48 Cd Cadmium	114.8 49 In Indium	118.7 50 Sn Tin	121.8 51 Sb Antimony	127.6 52 Te Tellurium	126.9 53 I Iodine	131.3 54 Xe Xenon	
208.9 77 Ir Iridium	195.1 78 Pt Platinum	197.0 79 Au Gold	200.6 80 Hg Mercury	204.4 81 Tl Thallium	207.2 82 Pb Lead	209.0 83 Bi Bismuth	210.0 84 Po Polonium	210.0 85 At Astatine	222.0 86 Rn Radon	
262 109 Mt Meitnerium	272 110 Uun Ununnilium	272 111 Uuu Unununium	277 112 Uub Ununbium							

For more information, please contact:

152.0 62 Sm Samarium	157.3 63 Eu Europium	158.9 64 Gd Gadolinium	162.5 65 Tb Terbium	164.9 66 Dy Dysprosium	167.3 67 Ho Holmium	175.0 68 Er Erbium	187.0 69 Tm Thulium	207.2 70 Yb Ytterbium	223.0 71 Lu Lutetium	
243.0 94 Pu Plutonium	247.0 95 Am Americium	247.0 96 Cm Curium	247.0 97 Bk Berkelium	251.0 98 Cf Californium	252.0 99 Es Einsteinium	254.0 100 Fm Fermium	257.0 101 Md Mendelevium	259.0 102 No Nobelium	261.0 103 Lr Lawrencium	



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MD-CP150/200-BROCH