



# MOTOTRBO™ CP200d & CP100d

## YOU'RE SIMPLY MORE EFFICIENT

### BATTLE CARD

When choosing cost-effective two-way portable radios you don't need to compromise features or quality. Both MOTOTRBO CP200d and CP100d are powerful, flexible and affordable DMR two-way radios from Motorola Solutions. By smartly combining analogue and digital radio technology functionalities, MOTOTRBO CP200d and CP100d offer a large choice of features to suit your user's needs.

The CP200d's ruggedness and enterprise-level features has made it Motorola Solutions best seller all over the world. On the other hand the new CP100d is a MOTOTRBO entry-tier level radio offering the benefits of digital radios for professionals wanting to communicate with greater ease and efficiency.

The CP200d and CP100d keeps your workforce connected and coordinated when needed, with powerful audio functionalities that adapt to virtually any environment, boosting your team's performance to its maximum. They are both compatible with DMR II conventional repeaters, giving your team extended coverage. When your fleet is ready to migrate from analog to the benefits and functionalities of digital, you can migrate seamlessly with a simple software upgrade.



## UNIQUE SELLING FEATURES

### EXTENDED COVERAGE

- RF RX Sensitivity
- Extended Range Direct Mode

### AUDIO

- High Audio Performance: Loudness, Noise Suppression and Intelligibility
- Automatic Gain Control and Receive Audio Levelling
- Multi-Language Audio Profiles
- Trill Enhancement for Rolling Rs
- Customisable Voice Announcements
- Audio Accessory Mic Gain

### RUGGEDNESS

- Durable Housing Design
- Up to 14 Tests for 810 MIL-Specs (C, D, E, F, G, H), IP54 rated, extreme temperatures
- Battery Lock-in Mechanism
- Motorola Solutions stringent Accelerated Life Tests and manufacturing process

### ERGONOMICS AND DESIGN

- Simple and Easy to operate
- Blind Use Ergonomics Design
- Customisable Voice Announcements

### MORE UNIQUE FEATURES

- RFID Knob (optional Accessory)

## TARGET MARKETS

- Hospitality
- Logistics
- Retail
- Construction
- Warehouses



**CP200d**



**CP100d Series**

# WHY MOTOROLA SOLUTIONS MOTOTRBO CP200d?

- Experience and Quality
- DMR Network Communications
- Audio Performance
- Ruggedness
- Call Features
- Battery Life






Features	CP200d & CP100d 	RCA RDR2500	Why Motorola Solutions CP200d and CP100d ?
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## EXPERIENCE AND QUALITY









Leadership, Experience and Knowledge in the 2-Way Radio Industry		No <sup>1</sup>	<p><b>Motorola Solutions</b> has been consistently serving the communications industry for over 90 years providing assurances for customers in terms of deployment, solution expertise and on-going support and investment. MSI has more than 100K customers in 100 countries and more than 13,000 networks installed worldwide.</p>
In-House Product Design & Solutions		No <sup>2</sup> (rebranded chinese radios)	<p><b>Motorola Solutions</b> designs its own products and solutions helping to ensure high quality and reliability as well as continuing innovation thru patented technologies.</p>
Controlled Manufacturing with High Quality Process		Unknown	<p><b>Motorola Solutions</b> enforces stringent manufacturing processes and tests for all its products. Going beyond the standard industry tests, Motorola Solutions raises the bar and applies additional accelerated life tests to help ensure that the devices are of the highest quality.</p>
Seamless Integration among different radios technologies / End to End Solutions		No <sup>3</sup>	<p><b>Motorola Solutions</b> products are designed to be able to communicate seamlessly among different technologies, platforms and devices. Besides just radios, end to end solutions can include PTT over Broadband, surveillance cameras, access control, etc.</p>
Innovative Products and Solutions: Future Proven		No <sup>3</sup>	<p><b>Motorola Solutions</b> has authored patents 6000+ and invests heavily in R&amp;D to help ensure products incorporate innovative technologies.</p>
Warranty and Essential Repair Options	3 to up to 5 years 	3 Years <sup>3</sup>	<p><b>Motorola Solutions</b> customers can count 3 years support as purchase includes 2Y Warranty plus additional one year Essential Service Support and Repair, that guarantees replacements, feature upgrades and service. This coverage can be extended up to 5 years.</p>
Wide Range of Accessories		Limited to basic accessories <sup>3</sup>	<p><b>Motorola Solutions</b> offer an extensive portfolio of specialized accessories that accommodates user needs and preferences.</p>






<b>Features</b>	<b>CP200d</b> 	<b>CP100d</b> 	<b>RCA</b> <b>RDR2500</b>	<b>Why Motorola Solutions CP200d and CP100d ?</b>
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<b>DMR NETWORK COMMUNICATIONS</b>			
DMR Types Supported	Analog & Digital Conventional and DMR II	Analog & Digital Conventional and DMR II <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> support both Analog and Digital modes in Conventional mode as well as DMR II.
Bands Supported	VHF (136 -174 MHz) UHF (403-470 MHz)	VHF (136 -174 MHz) - UHF (400-470 MHz) <sup>3</sup>	Both <b>MOTOTRBO CP200d and CP100d</b> and RCA offer similar frequency bands of radio operation in UHF and VHF.
RX Sensitivity (Typical)	Analog: 0.22uV (12 dB SINAD)  Digital: 0.19uV (BER 5%)  	Analog : 0.22uV <sup>3</sup> (12 dB SINAD)  Digital: 0.20uV <sup>3</sup> (BER 5%)	<b>Both MOTOTRBO CP200d and CP100d</b> features an enhanced sensitivity parameter which can positively extend range coverage <sup>5</sup> , virtually without compromising battery life. (The lower the uV number, the better the RX Sensitivity).
RF TX High Power Output	4W (UHF), 5W (VHF)	5W (UHF), 5W (VHF) <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> features enhanced RF specs, especially RX sensitivity of CP200d which helps to maximize coverage <sup>5</sup> . A lower power of 4W in the UHF positively impacts the battery for extended time of radio operation for both CP100d and CP200d.
Out of Range Alert		No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> features an "Out of the Range Alert" that will alert users when they are getting out of the coverage zone helping users not to miss communications.
Extended Range Direct Mode		No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> radios can communicate via repeaters when within range or can automatically switch to direct mode if the direct signal is stronger than the repeater signal (e.g. working close together at the edge of the repeater coverage)








<b>Features</b>	<b>CP200d</b> 	<b>CP100d</b> 	<b>RCA</b> <b>RDR2500</b>	<b>Why Motorola Solutions CP200d and CP100d ?</b>
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<b>AUDIO PERFORMANCE</b>				
Rx Audio Output Power (Speaker)	0.5W @ 1% distortion (rated) 2.1W (Max) 	0.5W @ 3% distortion (rated) 1.8W (Max) 	1W @ 3% distortion (rated) <sup>3</sup> Max Audio: Not specified	<b>MOTOTRBO CP200d and CP100d</b> features very loud speaker audio output at maximum level. (MSI internal lab tests shows louder audio output than RCA <sup>6</sup> )
Loudness			Not specified <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> features high loudness that allows best performance in a wide range of demanding environments. Loudness: 99+ dBphons (digital) and 100+ (analogue) dBphons (MSI internal tests shows louder audio loudness higher than RCA <sup>6</sup> )
Audio Intelligibility			Not specified <sup>3</sup>	PESQ <sup>7</sup> Intelligibility is a key audio performance parameter that helps ensure the best audio clarity. <b>MOTOTRBO CP200d and CP100d</b> features a high PESQ score. (MSI internal tests shows better audio intelligibility than RCA <sup>6,7</sup> )
Noise Suppression			No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> offer Audio Noise Suppression in analog and digital modes providing clear audio under very noisy environments.

<b>AUDIO FEATURES</b>				
AGC and RX Audio Levelling			No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> RX Audio Levelling allows the radio to automatically adjust audio on the receiver side to account for inconsistent audio levels. Similarly, AGC (Automatic Gain Control) adjusts the microphone audio on the transmitting side to achieve optimal audio levels.
Multi-Language Audio Profiles			No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> audio profile can be optimised according to the tonal characteristics of many international languages
Trill Enhancement			No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> enhances the intelligibility of the Alveolar Trill (i.e Rolling "rrr") language pattern found in many international languages, so audio is clear and intelligible.
Customisable Voice Announcements & Audio Accessory Mic Gain			No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> allows users to personalise their radio voice announcements by using their own audio files to customize the default voice announcements or use the language of their preference. Users can also customize the MIC gain level desired to optimise audio performance when using audio accessories

Features	CP200d 	CP100d 	RCA RDR2500	Why Motorola Solutions CP200d and CP100d ?
<b>RUGGEDNESS</b>				
Operating Temperatures	  30°C / +60°C -22°F / +140°F		(-20°C) /+50°C <sup>3</sup> (-4°F) / +122°F	<b>MOTOTRBO CP200d and CP100d</b> are able to operate at higher and lower extreme temperatures which is key for helping to ensure continuous communications.
13+ different MIL-STD 810 Tests  IP54	  IP54 Mil STD 810- C,D,E,F,G  <ol style="list-style-type: none"> <li>1. Low pressure</li> <li>2. High Temperature</li> <li>3. Low Temperature</li> <li>4. Temperature</li> <li>5. Solar Radiation</li> <li>6. Rain</li> <li>7. Humidity</li> <li>8. Salt Fog</li> <li>9. Dust</li> <li>10. Vibration</li> <li>11. Shock .</li> <li>12. Packaging Test</li> </ol> Additionally <b>CP100d</b> is tested fo <ol style="list-style-type: none"> <li>13. Blowing Sand</li> <li>14. Shock (drop)</li> </ol>	IP54 Mil STD 810- C,D,E,F,G <sup>3</sup>  (No tests specified) <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> both pass multiple rigorous different 810- Mil-tests as well IP54 Ingress Protection.  <i>Note: Initial testing conducted at MSI labs indicates that RCA RDR2500 does not meet some of the ruggedness tests achieved by the MOTOTRBO CP200d/CP100d<sup>6</sup></i>	
Motorola Solutions ALT Tests		No <sup>3</sup>	A special set of <b>Motorola Solutions</b> Accelerated Life Tests (ALT) are conducted in addition to industry standards. <b>MOTOTRBO CP200d and CP100d</b> radios are released making sure they comply with these ruggedness tests in order to help ensure top notch quality levels.	

<b>Features</b>	<b>CP200d</b> 	<b>CP100d</b> 	<b>RCA</b> <b>RDR2500</b>	<b>Why Motorola Solutions CP200d and CP100d ?</b>
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<b>CALL FEATURES</b>				
Group and Private Calls	Yes <sup>4</sup>	Yes	Yes <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> have been designed with simplicity in mind to allow for out of the box, "ready to use" experience, with intuitive operation that allows new users just to grab and go into action. *in non-display models Rx only mode.
Priority Scan, One Touch Access,			No <sup>3</sup>	Going beyond just default voice announcements, <b>MOTOTRBO CP200d</b> allows users to personalize their own audio prompts, by importing customized audio files that can announce for example, channels group names instead of numbers, and can be played in any preferred language.
Extended Range Mode			No <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> radios can communicate via repeaters when within range or can automatically switch to direct mode if the direct signal is stronger than the repeater signal (e.g. working close together at the edge of the repeater coverage)
Radio Check, Remote Radio Remote Monitor, Radio Enable/Disable, Call Alert , Emergency Alert, TX Interrupt	Yes <sup>4</sup>	Yes <sup>4</sup>	Yes <sup>3</sup>	Both <b>MOTOTRBO CP200d and CP100d</b> and RCA offer similar features related to lone worker safety and security. (RCA offers a Lone Worker feature which functionality can be mirrored by enabling Radio Check, Remote Radio Monitor and Emergency Alerts).
Quick Text Messaging	No	Yes	Yes <sup>3</sup>	Both <b>MOTOTRBO CP200d and CP100d</b> and RCA offer similar frequency bands of radio operation in UHF and VHF
Voice Prompts Customization			No <sup>3</sup>	Both <b>MOTOTRBO CP200d and CP100d</b> allows users to personalise their radio voice announcements by using their own audio files to customise the default voice announcements or use the language of their preference
RFID Knobs (optional Accessory)		No	No <sup>3</sup>	<b>MOTOTRBO CP200d</b> offers Knobs with embedded passive RFID tags made of special material that can withstand extreme temperatures. This capability can help to enable 3rd party applications like personal tracking and radios inventory.

<b>BATTERY LIFE</b>				
Standard Battery Life (Analog / Digital)	<b>Standard</b> 11.5 hrs / 14.5 hrs (w/ 1600mAh) 	<b>Standard</b> 10.7 hrs / 14.4 hrs (w/ 1700mAh) 	<b>Standard</b> 10hrs / 14 hrs (w/ 1800mAh, B2618LI) <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> provide longer battery life times even with less battery capacity when compared to RCA.
High and Ultra-High Cap Battery Life (Analog / Digital)	<b>High Cap</b> 15.5 hrs / 19.5 hrs (w/ 2250mAh)  <b>Ultra High Cap</b> 19.5 hrs / 25 hrs (w/ 2900mAh)	<b>High Cap</b> 15.5 hrs / 19.5 hrs (w/ 2250mAh)  <b>Ultra High Cap:</b> 14.5 hrs / 18.5 hrs (w/ 2200mA)	No optional battery featured <sup>3</sup>	<b>MOTOTRBO CP200d and CP100d</b> provide higher capacity battery options for longer operating hours.

## SOURCE REFERENCES / FOOTNOTES

[1] RCA History (Wikipedia) <https://en.wikipedia.org/wiki/RCA>

[2] RCA radios FCC Filings: [RCA FCC Communications Systems FCC ID Applications \(XYH\)](#)

[3] For specs and features on RDR2500 series click in each model [RDR2500](#), [RDR2550](#), [RDR2600](#) or <https://www.discounttwo-wayradio.com/rdr2500>

[4] For non-display models Radio Check, Radio Monitor and Radio enable/disable functions works on decode(receive) mode only.

[5] Coverage may also depend on many external different variables like terrain, obstacles, structures, etc.

[6] These tests were conducted in MSI Labs using one unit sample per test. A bigger sample of radios would be required in order to make the results statistically meaningful.

[7] Speech & Intelligibility tests are conducted using PESQ/POLQA/ABC-MRT audio analysis algorithms which are compliant with ITU industry standards.

## MOTOROLA SOLUTIONS MARKETING MATERIAL

- **CP100d Specs:** [motorolasolutions.com/CP100d](https://motorolasolutions.com/CP100d)
- **CP200d Specs:** [motorolasolutions.com/CP200d](https://motorolasolutions.com/CP200d)

**Note:** Motorola Solutions Data Specifications subject to change without notice. All specifications shown are typical unless otherwise stated.



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