



# MOTOTRBO™ CP200d™ PORTABLE RADIO

YOU'RE SIMPLY MORE EFFICIENT



You want to connect your workforce as efficiently as possible. You expect your radios to be affordable but flexible, so they can evolve with you. Now there's a portable that gives you great voice communications today, and a path to crisp and clear digital voice communications when you're ready.

Versatile and powerful, MOTOTRBO™ combines the best of two-way radio functionality with the latest analog and digital technology. The MOTOTRBO portfolio offers the right device for the right user, from voice-only portables to feature-rich voice and data radios.

The rugged MOTOTRBO CP200d™ radio offers all the benefits of the latest technology – up to 40% longer battery life, twice the capacity, greater coverage and superior audio. This affordable portable is compatible with the MOTOTRBO features you'll find are business-essential, for example a transmission can be interrupted to prioritize critical communications.

It's easy to transition your business to digital technology. The CP200d delivers the same easy-to-use features, form factor and durability as the CP200 portable as well as the same batteries and chargers you use today. It can operate in digital and analog modes concurrently so it fits seamlessly into your existing communication system, allowing you to migrate to digital at your own pace.

You can also choose the analog-only version of the CP200d radio and unlock the capabilities of digital when the time is right. Your investment is safe: all you will need is a simple software upgrade. Now you can improve the efficiency of your operation with easy-to-use voice communication that's right for you.

## FEATURES

- Analog / Digital
- Voice Communications
- Dual Capacity Direct Mode<sup>1</sup>
- Digital Mobile Radio (DMR) Standards Compliant<sup>1</sup>
- Narrowbanding Compliant
- Transmit Interrupt (Decode Only)<sup>1</sup>
- Basic Privacy<sup>1</sup>
- Voice Announcement
- IP54 Rated

## OPTIONS

- Radio Management Suite

<sup>1</sup> Features only available in Digital mode

SIMPLE VOICE COMMUNICATIONS  
FOR THE EVERYDAY USER WHO WANTS TO STAY CONNECTED

## PRODUCT SPEC SHEET

MOTOTRBO™ CP200d™ PORTABLE RADIOS

### CONNECT AND COORDINATE CREWS

When you need a simple, reliable, cost-effective communication solution to help multiple work crews connect, coordinate and collaborate, CP200d two-way portable radios are made to get the job done right. With their easy-to-use ergonomics and crisp, clear audio, now your teams can work more efficiently.

Unleash the power of your CP200d radios with Motorola Original® accessories. They're the only accessories designed, built and tested with your radio to optimize its performance. (See separate accessory fact sheet for full portfolio).

### IMPROVE THE WAY THEY WORK

A construction worker carries his CP200d as an essential part of his toolkit. The digital technology gives him excellent coverage across the entire site. And it has significantly better battery life too, so he knows he'll have reliable voice communications all day long.

The manufacturing team in a parts factory relies on CP200d portables to coordinate operations. The digital noise-cancelling software filters out the worst of the background noise, allowing them to hear clearly over loud machinery. Factory capacity is expanding, so they're running MOTOTRBO Dual Capacity Direct Mode, which can fit twice as many calls into the same spectrum.

A security guard uses his CP200d to alert the control room to some suspicious activity. The radio's intuitive design is easy to use in the dark, and even when he speaks softly, he knows that the digital AGC (Automatic Gain Control) will automatically boost the volume so he's heard clearly back in the office. And if it comes to the worst, he can use one of the programmable side buttons to call for help – with one touch.

### MIGRATE AT YOUR OWN PACE

Keeping operations running smoothly during a change in communication systems is vital to any business. It's easy to migrate to digital with the CP200d because it delivers the same features, form factor and durability of the CP200 as well as using the same batteries and chargers. It can operate in analog and digital modes concurrently - and to ease the transition even further, the dynamic mixed mode repeater functionality streamlines automatic switching between analog and digital calls. So you can start using MOTOTRBO radios and repeaters on your existing analog system, then migrate to digital when your business is ready.

### MANAGE YOUR FLEET MORE EFFICIENTLY

We've designed the CP200d to be as efficient to operate as it is cost-effective to buy. That's why we've integrated the powerful fleet management capabilities of Motorola's Radio Management solution into every radio.

Gain even greater efficiency when you migrate to digital. Your radio will operate up to 40% longer than analog on the same battery – and you get twice the capacity from the same 12.5 kHz channel, using our Dual Capacity Direct Mode feature.

### INTEGRATE YOUR DEVICES SEAMLESSLY

Make sure your new CP200d radios are ready when you are. We can bring together the right experts and processes to help you integrate CP200d radios into your business, quickly and cost-effectively. Motorola's Implementation Services include Coverage Mapping, Site Integration and Device Programming.

### GET DURABILITY THAT ENDURES

The CP200d is made to last. It is rated IP54 (splashproof, virtually dustproof), so it can be used even in harsh environments. Moreover, it has been proven tough in Motorola's grueling Accelerated Life Test program, in which the design must survive a simulated 5 years of hard service before it is accepted.

The CP200d is backed by a two-year Standard Warranty (US and Canada) with a minimum one-year warranty on Motorola-branded accessories. Because wear and tear happens, Motorola recommends Service from the Start Lite, which delivers accelerated turnaround on radio repairs and even covers shipping costs. By reducing your downtime, Service from the Start Lite helps you to lower your total cost of ownership and focus on your business operations, not your technology.



**PRODUCT SPEC SHEET**  
MOTOTRBO™ CP200d™ PORTABLE RADIOS

**GENERAL SPECIFICATIONS**

	CP200d	
	VHF	UHF BAND 1
Channel Capacity	16	
Typical RF Output		
Low Power	1 W	1 W
High Power	5 W	4 W
Frequency	136-174 MHz	403-470 MHz
Radio Dimensions (H x W x D) with battery:		
NiMH 1400mAh	5.0 x 2.4 x 1.7 in (127.7 x 61.5 x 42.0 mm)	
Slim Li-Ion 1600mAh	5.0 x 2.4 x 1.5 in (127.7 x 61.5 x 39.0 mm)	
Li-Ion 2200mAh	5.0 x 2.4 x 1.8 in (127.7 x 61.5 x 44.0 mm)	
Weight with battery:		
NiMH 1400mAh	14.3 oz (406 g)	
Slim Li-Ion 1600mAh	12.1 oz (341 g)	
Li-Ion 2200mAh	12.2 oz (346 g)	
Power Supply	7.5V (Nominal)	
FCC Description	ABZ99FT3092	ABZ99FT4094
IC Description	109AB-99FT3092	109AB-99FT4094

**BATTERY**

Average battery life at 5/5/90 duty cycle with carrier squelch and transmitter in high power.<sup>2</sup>

NiMH (1400 mAh) Battery	Analog: 9 hrs / Digital: 11.5 hrs
Li-Ion Slim (1600 mAh) Battery	Analog: 10.5 hrs / Digital: 13.5 hrs
High Cap Li-Ion (2200 mAh) Battery	Analog: 14.5 hrs / Digital: 18.5 hrs

**RECEIVER**

Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 25 kHz <sup>3</sup>	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	
Analog Sensitivity (12 dB SINAD)	0.3 uV / 0.22 uV (typical)	
Digital Sensitivity (5% BER)	0.25 uV / 0.19 uV (typical)	
Intermodulation (TIA603D)	70 dB	
Adjacent Channel Selectivity (TIA603D)	45 dB @ 12.5 kHz / 70 dB @ 25 kHz <sup>3</sup>	
Spurious Rejection (TIA603D)	70 dB	
Rated Audio	0.5 W (Internal)	
Audio Distortion @ Rated Audio	5% (3% typical)	
Hum and Noise	-40 dB @ 12.5 kHz / -45 dB @ 25 kHz <sup>3</sup>	
Audio Response	TIA603D	
Conducted Spurious Emissions (TIA603D)	-57 dBm	

**TRANSMITTER**

Frequency	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 25 kHz <sup>3</sup>	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	
Low Power Output	1 W	1 W
High Power Output	5 W	4 W
Modulation Limiting	± 2.5 kHz @ 12.5 kHz / ± 5.0 kHz @ 25 kHz <sup>3</sup>	
FM Hum and Noise	-40 dB @ 12.5 kHz / -45 dB @ 25 kHz <sup>3</sup>	
Conducted / Radiated Emission	-36 dBm < 1 GHz / -30 dBm > 1 GHz	
Adjacent Channel Power	60 dB @ 12.5 kHz / 70 dB @ 25 kHz <sup>3</sup>	
Audio Response	TIA603D	
Audio Distortion	3% (typical)	
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination of 12.5 kHz Voice and Data: 7K60F1W	
Digital Vocoder Type	AMBE +2™	
Digital Protocol	ETSI TS 102 361-1, -2, -3	

<sup>2</sup> Actual battery runtime observed may vary.

<sup>3</sup> 25 kHz may not be available in the U.S. for Part 90 operation due to the FCC's Narrowbanding requirements. Specifications subject to change without notice. All specifications shown are typical.



**PRODUCT SPEC SHEET**  
**MOTOTRBO™ CP200d™ PORTABLE RADIOS**

<b>MILITARY STANDARDS</b>											
	<b>810C</b>		<b>810D</b>		<b>810E</b>		<b>810F</b>		<b>810G</b>		
Applicable MIL-STD	Method	Procedures	Method	Procedures	Method	Procedures	Method	Procedures	Method	Procedures	
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II	
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I-A1, II/A1	501.4	I/Hot, II/Hot	501.5	I-A1, II	
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I-C3, II/C1	502.4	I-C3, II/C1	502.5	I-C3, II	
Temperature Shock	503.1	–	503.2	I/A1/C3	503.3	I/A1/C3	503.4	I	503.5	I-C	
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I-A1	
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III	
Humidity	507.1	II	507.2	II	507.3	II	507.4	–	507.5	II - Aggravated	
Salt fog	509.1	–	509.2	–	509.3	–	509.4	–	509.5	–	
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I	
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I-cat.24	
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, V, VI	

<b>ENVIRONMENTAL SPECIFICATIONS</b>	
Operating Temperature	-30°C <sup>4</sup> / +60°C
Storage Temperature	-40°C <sup>4</sup> / +85°C
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
ESD	IEC 61000-4-2 Level 3
Dust and Water Intrusion	IEC60529 - IP54
Packaging Test	Per MIL-STD

<sup>4</sup> Radio only - Li-Ion battery -10°C  
 Specifications subject to change without notice.  
 Testing completed using portable radio with attached battery and antenna.  
 All specifications shown are typical.



For more information on the MOTOTRBO™ CP200d™, visit [motorolasolutions.com/mototrbo](http://motorolasolutions.com/mototrbo).

To find your nearest Motorola Channel Partner, go to [motorolasolutions.com/contactus](http://motorolasolutions.com/contactus).

**MOTOTRBO™**  
 DIGITAL REMASTERED.

Motorola Solutions, Inc.  
 1301 East Algonquin Road, Schaumburg, Illinois 60196, U.S.A.  
 800-367-2346 [motorolasolutions.com](http://motorolasolutions.com)

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2013 Motorola Solutions, Inc. All rights reserved. R3-4-2065

