



# Motorola CP1100

## Entry Level Commercial Portable Two-way Radio

### Performance You Can Count On.

The Motorola CP1100 provides your business with a competitive communications edge, enhancing employee efficiency and overall profitability. Affordable and easy to use, the CP1100 helps keep your operations on schedule, maximize job-shift productivity, enhance security and increase overall customer satisfaction. The versatile CP1100 also has a full complement of accessories for customizing the radio to suit your needs.



CP1100

#### Lightweight & Compact

CP1100 which is less than 250gm\* is designed to fit comfortably in the hand.

#### Excellent Audio Quality

2000mW audio output, speaker magnetic field reduction, wind-noise reduction and improved RF specifications deliver superior audio quality.

#### Flexible and Durable Battery Life Solutions

The custom CP1100 Li-Ion battery packs are designed and manufactured to ensure durability. An alkaline battery kit is available as an optional accessory.

#### Voice Activation (VOX)

Enables convenient hands-free operation with optional accessories.

#### Scramble

Build-in voice inversion scrambling for additional layer of privacy.

#### Customizable and Expanded PL/DPL codes

CP1100 offers 84 DPL codes, 84 inverted DPL codes, 39 PL codes, and 6 fully customized PL codes, to set-up many unique talk groups.

#### Tri-Color LED Interface

Convenient interface allows users to identify radio features and status.

#### Customer Programming Software (CPS)\*\*

Provides end-users easy access to change radio settings for channels, programmable buttons, audio profile, scan list and customizable PL codes.

#### General Features:

- 10 Channels
- Accessory Mic Gain
- Battery Save
- Power Select – 2/4Watts (UHF) & 2/5Watts (VHF)
- Scan and Scan List
- Monitor
- Time-Out Timer
- USB CPS Interface

A wide range of **Motorola Original®** audio, energy and carrying accessories are available to enhance your productivity.

#### Recommended Accessories:

- Lightweight Headset with Boom Microphone
- Swivel Earpiece with Inline PTT (PTT) Microphone
- Earbud with Clip Microphone and Push-to-Talk (PTT)
- Remote Speaker Microphone

\* With standard Li-Ion battery.

\*\* CPS is sold separately. Windows® XP, Windows 2000 compatible, separate USB cable required.

## CP1100 Radio Specifications#

### General Specifications

|   | UHF   | VHF           |
|---|---|---------------|
| Frequency Range   | 403 – 445 MHz, 423 – 445 MHz, 438 – 470 MHz         | 146 – 174 MHz |
| Audio Output  | 2000 mW   |               |
| Channel Capacity  | 10 Channels   |               |
| Channel Bandwidth   | 12.5/25 kHz   |               |
| Dimensions (H* x W* x D*)<br>w/Standard Li-Ion Battery  | 4.5 x 2.2 x 1.6 inches (115.6 x 57.6 x 40.5 mm)     |               |
| Weight w/Standard Li-Ion Battery<br>w/High Capacity Li-Ion Battery  | 8.6 oz (244g)<br>10.3 oz (293g)                     |               |
| Average Battery Life @ 5/5/90 (with Battery Save On):<br>w/Standard 1100 mAh Li-Ion Battery<br>w/High Capacity 2200 mAh Li-Ion Battery<br>w/Optional Alkaline Battery Accessory | Up to 8.5 Hours<br>Up to 17 Hours<br>Up to 26 Hours |               |
| Power Supply Voltage  | 7.2 Volts DC (Li-Ion Battery Pack or Alkaline)      |               |

### Transmitter

|  |   |                    |
|--|---|--------------------|
| RF Output<br>High<br>Low                 | 4 Watts<br>2 Watts  | 5 Watts<br>2 Watts |
| Frequency Stability                      | < 2 ppm   | < 2.5 ppm          |
| Spurs & Harmonics                        | < -21 dBm   |                    |
| FM Hum & Noise                           | -40 dB @ 12.5 kHz with compander disabled -45 dB @ 25.0 kHz |                    |
| Modulation Limiting                      | ±2.5 kHz @ 12.5 kHz ±5.0 kHz @ 25.0 kHz                     |                    |
| Adjacent Channel Power                   | > 65 dBc  |                    |
| Radiated Spurious Emissions              | < -20 dBm   |                    |
| Audio Frequency Response (0.3 - 3.0 kHz) | +5 to -5 dB @ 12.5 kHz, +3 to -3 dB @ 25 kHz                |                    |
| Audio Distortion                         | < 2%  |                    |

### Receiver

|  |                                   |  |
|--|-----------------------------------|--|
| Sensitivity (12 dB SINAD)                    | -122 dBm (0.18 µV)                |  |
| Adjacent Channel Selectivity                 | 60 dB @ 12.5 kHz 65 dB @ 25.0 kHz |  |
| Intermodulation Rejection                    | 60 dB                             |  |
| Spurious Response Rejection (blocking 1 MHz) | 80 dB                             |  |
| Audio Distortion                             | < 5%                              |  |
| CSQ Hum & Noise @ 12.5 kHz                   | -50 dB                            |  |
| PL Hum & Noise @ 12.5 kHz                    | -50 dB                            |  |
| DPL Hum & Noise @ 12.5 kHz                   | -45 dB                            |  |
| Radiated Spurious Emissions (< 1 GHz)        | < -54 dBm @ 10m                   |  |
| Radiated Spurious Emissions (> 1 GHz)        | < -41.3 dBm @ 10m                 |  |
| Audio Output @ < 5% Distortion               | 2.0W @ 8 ohms                     |  |

### Military Specifications

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

### Environmental Specifications

|                       |                                      |
|-----------------------|--------------------------------------|
| Operating Temperature | -30°C to +60°C (Radio)               |
| Sealing               | IP55                                 |
| Shock & Vibration     | Polycarbonate Housing passes EIA 603 |
| Dust & Humidity       | Satisfied EIA 603                    |

\*Specifications subject to change without notice.

All specifications shown are typical. Radio meets applicable regulatory requirements.



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