Commercial Portable Two-Way Radio
Motorola CP1660

Enhanced functionality and easy to use—reliable communication for a higher level of productivity
Reliable and easy to use communication
with enhanced functionality—
making it easier to get the job done.

In today’s business environment, easy and prompt communication with your workforce is vital to improving response time, empowering employees to accomplish more in less time and increasing customer satisfaction. Motorola’s two-way radios provide a durable, high-quality voice communication solution that helps your business increase productivity and serve your customers in the best manner possible.

Ideal for light manufacturing, retail, hospitality services, property and real estate management, the Motorola CP1660 commercial portable radio brings you the quality features you need at a competitive price. With its full keypad for increased ease of use, extensive feature set, and ergonomic shape for comfortable handling in a durable, lightweight, compact design, you get just what it takes to enhance communication while increasing efficiency and productivity.
CP1660 Enhanced Functionality Benefits
The strong performance and extensive features, including a full keypad for added convenience, of the CP1660 Commercial Portable Radio provide simple, intuitive operation and help ensure clear, dependable communication.

• **Full keypad** provides easy accessibility to change channels or place a selective call (DTMF signaling).

• Built-in simple voice scrambling for increased privacy.

• Built-in DTMF signaling provides **caller identification** and **private communication**.

• VOX ready for **hands-free communication**—users can focus on the job at hand.

• **Tighter specifications** provide enhanced rejection of interference so you can get your message through clearly.

• **X-pand technology** provides crisp, clear and strong audio quality in noisy environments.

• **Multi-channel capability**—99 channels to support communication amongst all your employees.

• User programmable feature—allows **customization of radio profiles** while on the go.

• **Lilon battery provides up to 11 hours (5/5/90 duty cycle) of battery life at high power** to meet the demands of your employee’s work shift. A high-capacity battery option is available for those with longer shift requirements or increased communication needs.

• **High power**—5 watt (VHF) / 4 watt (UHF)—adjustable power levels help extend battery life.

• 5 programmable buttons—enabling easy, **one-touch access for up to 10 user-selectable features**.

• **Talkaround capability** enabling communication even when a repeater is not being used.

• **Rapid-rate drop-in charging**—charges standard capacity batteries in less than 3 hours with the included drop-in charger.

• **Easy-to-handle, lightweight, compact design.**
CP1660 Radio Components and Benefits

CP1660 Portable Radio

1. Large ON/OFF/Volume control makes adjusting volume quick and easy.
2. LED indicator indicates channel, scan and monitor status.
3. Large, textured PTT button—easy to find and use without looking.
4. Side programmable buttons enable instant access to up to four user-determined functions.
5. Accessory connector provides convenient access for audio accessories.
6. Connecting port enables radio programming by computer.
7. Front left/right buttons for channel change, navigating menus or parameter selections in front panel programming mode.
8. Front programmable buttons enable instant access up to six user-determined functions.
9. Large 8-digit alphanumeric LCD with user friendly icons.
10. Full keypad provides easy accessibility to change channels or place a selective call (DTMF signaling).
More Features

- **Battery Saver Mode** extends the life of the battery, providing longer talk time.

- **Keypad Lock** prevents accidental press of the buttons.

- **Channel Alias** provides easy identification of a channel.

- **Prime Channel** allows a quick and easy move to a selected prime channel.

- **Scan** allows users to monitor activity on different communication channels, so that important messages are not missed. **Priority Scan** is available for those who constantly monitor a particular channel.

- **Nuisance Channel Delete** removes unwanted channels temporarily from the scan list during scan.

- **Volume Set** allows the user to check the audio and alert tone volume at the press of the button.

- **Sticky Monitor** allows users to stay on monitor mode without constantly pressing the monitor button.
CP1660 Radio Accessories

The CP1660 offers a full range of Motorola Original® audio, energy and carrying accessories to customize a radio solution specific to your needs. Headsets offer a comfortable, easy communication option when you need your hands free to focus on your operations. A high capacity battery is available to support long shifts common in the manufacturing and hospitality businesses and a soft leather carry case is available as a lightweight and comfortable carrying solution.

This radio also supports Mag One™ audio accessories, which provide an affordable option for light-duty radio users.
CP1660 Radio Specifications*

### General Specifications

**Frequency Range**
- VHF: 136-174 MHz
- UHF: 403-480 MHz
- 435-480 MHz

**Memory Channels**
- 99 CH

**Channel Spacing**
- 12.5/25 kHz switchable

**Operating Temperature Range**
- Radio: -30°C to +60°C

**Dimensions (H X W X D) with**
- LiIon battery: 120 x 55 x 35.5 mm
- NiMH battery: 120 x 55 x 36.5 mm
- High Capacity LiIon battery: 120 x 55 x 40.7 mm

**Weight with**
- LiIon battery: 335.0 gm
- NiMH battery: 394.5 gm
- High Capacity LiIon battery: 342.0 gm

**Average Battery Life @5-5-90% Duty Cycle, with**
- High Power: 20 hrs
- Low Power: 17 hrs

**Sealing**
- Passes rain testing per IP54

### Transmitter

**RF Output**
- High Power: 5W
- Low Power: 1W

**Spurs and Harmonics**
- 9kHz - 1GHz: < -36dBm
- > 1GHz: < -30dBm

**Frequency Stability (-30°C to +60°C)**
- ±2.5 ppm

**FM Hum & Noise**
- > 40dB

**Modulation Limiting**
- ≤ 5kHz (25kHz)
- ≤ 2.5kHz (12.5kHz)

**Audio Response (from 6dB/oct pre-emphasis, 300-3000Hz)**
- ≤ +1/-3dB

**Audio Distortion @ 1kHz tone, 60% rated max dev.**
- ≤ 5%

### Receiver

**Sensitivity (12dB SINAD)**
- VHF: ≤ -119 dBm (12.5kHz)
- UHF: ≥ 75dB (25kHz), ≥ 65dB (12.5kHz)

**Spurious Rejection**
- 75dB

**Hum and Noise**
- > 40dB

**Audio Output @ ≤5% Distortion**
- ≤ -57dBm for below 1GHz
- ≤ -47dBm for above 1GHz
- 500mW (at 24 ohm)

### Military Standards

Applicable MIL-STD

- **Military Temperature Test**
  - High: Method 501.1 Proc/Proc: I, II
  - Low: Method 502.1 Proc: I, II

- **Military Temperature Shock Test**
  - Method 503.1 Proc: I

- **Military Solar Radiation Test**
  - Method 505.1 Proc: I

- **Military Humidity Test**
  - Method 507.1 Proc: I

- **Military Salt Fog Test**
  - Method 509.1 Proc: I

- **Military Vibration Test**
  - Method 514.2 Proc: I

*Availability subject to country’s laws and regulations. Radios meet applicable regulatory requirements. All specifications subject to change without notice.

Specifications are not representative of all radios and may vary in different radios.

Radio frequencies subject to availability.