



# Motorola P165 & P185

## Portable Two-Way Radios



P165

P185

### Easy-to-handle, lightweight, compact design.

Tough construction and reliable performance thanks to Motorola's unique Accelerated Life Testing (ALT)

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

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

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

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**.

5 programmable buttons enabling easy, **one-touch access to up to 10 user selected features**.

VOX ready for **hands-free communication** using a suitable headset.

Built-in simple voice scrambling for **increased privacy**.

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

**User programmable** feature allows customisation of radio profiles while on the go.

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

**Rapid-rate drop-in charging** - charge standard capacity batteries in less than 3 hours with the single unit charger.

Get the most from your radio using the wide range of **Motorola Original® accessories**: microphones, earpieces, carry cases, a high capacity battery and more allow the user to match the radio to their needs.

Remote Speaker Microphones can be clipped to a lapel or pocket, allowing messages to be sent and received more easily.

Earpieces and headsets let you keep your hands free without missing messages.

Carry cases let you put the radio on your belt and help prevent damage.

High capacity battery means longer run-times between recharging.

### Enhanced functionality, reliable communication

Easy and prompt communication with your workforce is vital to improving response time, strengthening employee efficiency and increasing customer satisfaction. Motorola's two-way radios provide a durable, high-quality voice communication solution that helps your business increase productivity and provide excellent customer service. Ideal for light manufacturing, retail, hospitality services,

property and real estate management. The Motorola P165 and P185 portable radios bring you quality features you need at a competitive price. With an extensive feature set and ergonomic shape for comfortable use in a durable, lightweight, compact design, you can enhance communication while increasing efficiency and productivity.

| General Specifications   | P165 & P185   |                          |
|--|---|--------------------------|
|  | VHF   | UHF                      |
| Frequency Range  | 136-174MHz  | 403-447MHz<br>435-480MHz |
| Channel Capacity   | 99 CH   |                          |
| Channel Spacing  | 12.5/20/25 kHz switchable   |                          |
| Operating Temperature Range  | -20°C to +55°C  |                          |
| Storage Temperature Range  | -40°C to +85°C  |                          |
| Dimensions (H X W X D) with<br>Lilon battery<br>NiMH battery<br>High Capacity Lilon battery                    | 120 x 55 x 35.5 mm<br>120 x 55 x 36.5 mm<br>120 x 55 x 40.7 mm                    |                          |
| Weight with<br>Lilon battery<br>NiMH battery<br>High Capacity Lilon battery                                    | 335g<br>395g<br>340g  |                          |
| Average Battery Life @5-5-90% Duty Cycle, with<br>Lilon battery<br>NiMH battery<br>High Capacity Lilon battery | High Power<br>up to 11 hrs<br>up to 9 hrs<br>up to 16 hrs                         |                          |
| Sealing  | Rated IP54 - protected against harm from dust or water spray                      |                          |
| Shock & Vibration  | Diecast body with impact resistant polycarbonate housing, Meets MIL-STD810C/D/E/F |                          |
| Dust & Humidity  | Weather resistant housing Meets MIL-STD810C/D/E/F                                 |                          |

| Transmitter  | High Power 5W  | Low Power 1W | High Power 4W | Low Power 1W |
|--|--|--------------|---------------|--------------|
| RF Output  |  |              |               |              |
| Spurs and Harmonics                                    | 9kHz - 1GHz <-36dBm<br>>1GHz <-30dBm                         |              |               |              |
| Frequency Stability (-20°C to +55°C)                   | 1.5 kHz @ 12.5 kHz<br>2.0 kHz @ 20/25 kHz                    |              |               |              |
| Modulation Limiting                                    | ≤ ± 5KHz @ 25KHz<br>≤ ± 4KHz @ 20KHz<br>≤ ± 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 (20dB SINAD)      | < -107 dBm (1µV/50 Ohm)                            |
| Adjacent Channel Selectivity  | >70dB (25kHz), >65dB (12.5kHz)                     |
| Intermodulation               | >65dB  |
| Spurious Rejection            | >70dB  |
| Audio Distortion              | <5%  |
| Conducted Emission            | < -57dBm for below 1GHz<br>< -47dBm for above 1GHz |
| Audio Output @ <5% Distortion | 500mW (at 24 ohm)                                  |

| Military Standards | 810C   |                    | 810D   |             | 810E   |             | 810F   |               |
|--------------------|--------|--------------------|--------|-------------|--------|-------------|--------|---------------|
|                    | Method | Proc./Cat.         | Method | Proc./Cat.  | Method | Proc./Cat.  | Method | Proc./Cat.    |
| High Temperature   | 501.1  | I, II              | 501.2  | I/A1, II/A1 | 501.3  | I/A1, II/A1 | 501.4  | I/Hot, II/Hot |
| Low Temperature    | 502.1  | I                  | 502.2  | I/C3, II/C1 | 502.3  | I/C3, II/C1 | 502.4  | I/C3, II/C1   |
| Temperature Shock  | 503.1  | -                  | 503.2  | I/A1C3      | 503.3  | I/A1C3      | 503.4  | I             |
| Solar Radiation    | 505.1  | II                 | 505.2  | I           | 505.3  | I           | 505.4  | I             |
| Humidity           | 507.1  | II                 | 507.2  | II          | 507.3  | II          | 507.4  | -             |
| Salt Fog           | 509.1  | -                  | 509.2  | -           | 509.3  | -           | 509.4  | -             |
| Blowing Dust       | 510.1  | I                  | 510.2  | I           | 510.3  | I           | 510.4  | I             |
| Vibration          | 514.2  | VIII/F,<br>Curve-W | 514.3  | I/10, II/3  | 514.4  | I/10, II/3  | 514.5  | I/24          |

\* Availability subject to individual country's law and regulations. Radios meet applicable regulatory requirements. All specifications listed are typical and are subject to change without notice. Specifications are issued for guidance only.

Conforms to R&TTE directive 1999/5/EC

To ensure compliance with RF energy exposure standards and regulations, use only Motorola-approved batteries and accessories.

Contact your local Motorola Authorised Dealer to find out more about how communicating with Motorola radios will benefit your organisation.

Version 1 05/09



Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EA RS-3168 in Shock, Vibration, Dust, Humidity, IP54 for Sealing



Compliance with ISO 9001 Standard an international quality system assurance on design, development, production, installation and servicing of a product.



Stamp of Approval from the U.S. Military for use in rough environments



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