

EP450™ Portable Radio

Industrial

SPECIFICATION SHEET



BENEFITS

16 Channels

Easily organize your teams into different talkgroups. An ideal tool for complex operations where communication is key.

Dual Priority Scan

Monitor the priority channel and keep updated on critical information. Use this feature when you need to monitor one or two workgroups more often than the rest.

Internal Voice Operated Transmission (VOX)

With the use of an appropriate audio accessory, you can speak and listen to a radio conversation without having to use your hands. Don't stop your tasks, save time and be more productive.

Selective Radio Inhibit

The EP450 radio includes a security feature that enables the base station to remotely deactivate a radio unit. This feature is especially useful to prevent lost or stolen radios from compromising the integrity of your system. As soon as the radio is turned on, the base station sends a signal that disables all controls except the On/Off button.

PTT-ID (encode)

Optimize your air time by quickly identifying a radio user at the start of the transmission.

FEATURES

- 16 Channels
- 2 Programmable Buttons
- CSQ / PL / DPL / inv-DPL
- Busy Channel Lockout
- Dedicated RX Channel
- X-Pand™
- Internal Voice Operated Transmission (VOX)
- Nuisance Channel Delete
- Call Alert
- Time-Out Timer
- Repeater / Talkaround
- Dual Priority Scan
- MDC-1200 Signaling
 - PTT-ID (encode)
 - Radio Check (decode)
 - Selective Radio Inhibit (decode)
- Quik-Call II Signaling
 - Call Alert (decode)
 - Voice Selective Call (decode)
- DTMF Signaling
 - PTT-ID (encode)
- Internal Option Board Port

ACCESSORIES

Motorola offers a wide range of original accessories to enhance your radio's functionality for every communication need. Motorola Original Accessories are built with the highest Motorola quality standards ensuring effectiveness and durability.



After 75 years of commitment, Motorola continues developing solid relations with its clients, based on experience, technology and quality.

A company recognized for its leadership, by offering innovative communication and information solutions, enabling companies to increase the performance of their operations while satisfying the business' requirements.

The EP450 portable includes several features to enhance performance including: 16 channel, choice of frequency range, group capability within the same frequency, PL/DPL, internal VOX and multiple battery options.



EP450™ PORTABLE RADIO WITHOUT DISPLAY


| GENERAL | VHF | UHF |
|---|---|--|
| Dimensions | Height x Width x Depth 130.5 mm x 62 mm x 45 mm (5.12 in. x 2.44 in. x 1.77 in.) | |
| Weight | 397g | |
| Average Battery Life @ 5/5/90 Duty Cycle* (With High-Capacity Li-ion Battery) | 17 Hours (Low Power) / 12 Hours (High Power) | |
| Model Numbers | 136-162 MHz LAH65JDC9AA2_N 146-174 MHz LAH65KDC9AA2_N | 403-440 MHz LAH65QDC9AA2_N 438-470 MHz LAH65RDC9AA2_N 465-495 MHz LAH65SDC9AA2_N 490-527 MHz LAH65TDC9AA2_N |
| Frequency Range / FCC Approval | 136-174 MHz / ABZ99T3039 146-174 MHz / ABZ99T3045 | 403-440 MHz / ABZ99T4057 438-470 MHz / ABZ99T4056 465-495 MHz / ABZ99T4058 490-527 MHz |
| Channel Spacing | 12.5 / 20 / 25 kHz | |
| Temperature Range | -30° to 60°C | |
| Frequency Stability | ±2.5 ppm | |

| TRANSMITTER | VHF | UHF | RECEIVER | VHF | UHF |
|-------------------------------------|-------------------------------------|-----|--|-------------------------------------|-----|
| RF Power Output | | | Sensitivity (12 dB SINAD) (typical) | 0.22 µV | |
| High Power | 5 W | 4 W | Intermodulation | -70 dB | |
| Low Power | 1 W | 1 W | Selectivity- | -70 dB @ 25 kHz / -60 dB @ 12.5 kHz | |
| Modulation Limiting | ±2.5 @ 12.5kHz / ±4.0 @ 20kHz | | Spurious Rejection | -75 dB | |
| FM Hum and Noise | -45 dB @ 25 kHz / -40 dB @ 12.5 kHz | | Image Rejection and 1/2 F | -70 dB | |
| Conducted/ | -36 dBm < 1 GHz / -30 dBm > 1 GHz | | Output Audio Distortion | 500 mW | |
| Radiated Emissions | | | (7.5V / room Temperature) | | |
| Audio Response (0.3 - 3 kHz) | +1, 3dB | | Audio Distortion | 5% | |
| Audio Distortion | <3% | | Hum and Noise | -45 dB @ 25 kHz / -40 dB @ 12.5 kHz | |
| | | | Spurious Emission | -57 dBm < 1 GHz / -47 dBm > 1 GHz | |
| | | | (conducted and radiated) | | |

| MILITARY STANDARDS | 810C | | 810D | | 810E | | 810F | |
|--------------------------|---------|------------|---------|------------|---------|------------|---------|------------|
| Applicable MIL-STD | Methods | Procedures | Methods | Procedures | Methods | Procedures | Methods | Procedures |
| Low Pressure | 500.1 | 1 | 500.2 | 2 | 500.3 | 2 | 500.4 | 1 |
| High Temperature | 501.1 | 1,2 | 501.2 | 1,2 | 501.3 | 1,2 | 500.4 | 1,2 |
| Low Temperature | 502.1 | 1 | 502.2 | 1,2 | 502.3 | 1,2 | 500.4 | 1,2 |
| Temperature Shock | 503.1 | 1 | 503.2 | 1 | 503.3 | 1 | 500.4 | 1 |
| Solar Radiation | 505.1 | 1 | 505.2 | 1 | 505.3 | 1 | 500.4 | 1 |
| Rain | 506.1 | 1,2 | 506.2 | 1,2 | 506.3 | 1,2 | 500.4 | 1 |
| Humidity | 507.1 | 2 | 507.2 | 2,3 | 507.3 | 2,3 | 500.4 | 3 |
| Salt Fog | 509.1 | 1 | 509.2 | 1 | 509.3 | 1 | 500.4 | 1 |
| Dust | 510.1 | 1 | 510.2 | 1 | 510.3 | 1 | 500.4 | 1 |
| Vibration | 514.2 | 8,10 | 514.3 | 1 | 514.4 | 1 | 500.5 | 1 |
| Shock | 516.2 | 1,2,5 | 516.3 | 1,4 | 516.4 | 1,4 | 500.5 | 1 |

Specifications subject to change without notice. All electrical specifications and methods refer to EIA/TIA 603 standards.

 Motorola Accelerated Life Test
 Meets IP54 Standard

 Military Standards MIL-SPECS 810 C, D, E

Contact your Motorola Representative for more information.



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