

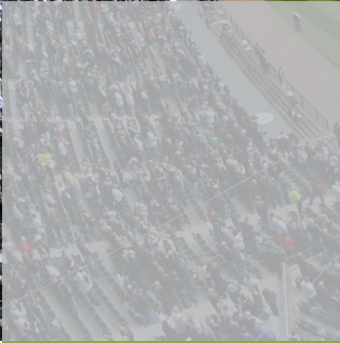
PD502

Digital Portable Radio



- Analog / Digital Dual Mode Operation for Easy Transition to Digital
- Pseudo Trunk Enhances System Access Without Additional Infrastructure





The PD502 is an open-standard DMR radio capable of providing quality voice communication in a design approved to IP54 and MIL-STD 810 testing. The Hytera-patented pseudo-trunking maximizes channel usage and the long lasting battery life yields approximately 16 hours under a 5-5-90 duty cycle in digital mode. PD502 is the ideal solution for organizations looking for a cost-effective way to migrate to clear digital communication.

Applications

Hotel

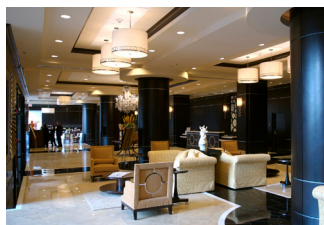
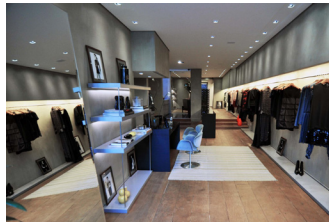
Education

Security

Warehouse

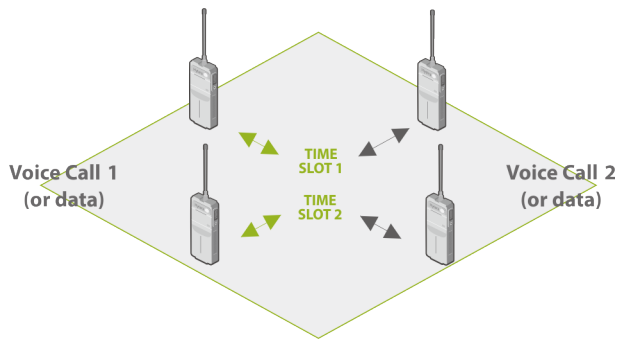
Retail

Events

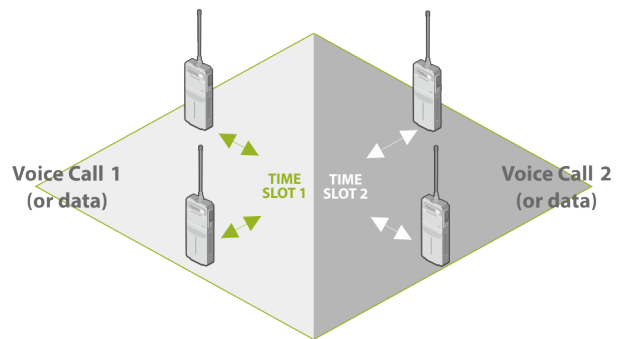


Product Features

- Smaller, Sleeker, Lighter**
 The size is 4.6 X 2.17 X 1.1 inches, dual-color injection molding, weighing in at only 9.7oz.
- Long Battery Life**
 In digital mode, the PD502 can operate for approximately 16 hours under a duty cycle of 5-5-90.
- Rugged & Reliable**
 Complies with MIL-STD-810 C/D/E/F/G standards.
- Advanced Signaling**
 Supports multiple advanced analog signaling modes, including HDC1200, 2-Tone and 5-Tone, providing better integration into existing analog radio fleets.
- Pseudo Trunk**
 This virtual trunking feature allocates a free timeslot for urgent communications. This effectively enhances frequency efficiency and allows you to communicate in a timely manner in emergency situations. See example below.
- Secure Communication**
 Provides basic digital encryption and Scrambler feature in analog mode.
- DMRA Data Service**
 The data protocol is fully compliant to the DMRA standard.
- One Touch Call/Text**
 Supports One Touch features that include Preprogrammed Text Messages, Voice Calls and Supplementary Features.
- Supplementary Features (optional)**
 The PD502 can decode radio enable, radio disable, and remoter monitor, as well as Priority Interrupt.
- Dual Mode (Analog & Digital)**
 Dual modes operation allows the programming of both analog to digital migration.
- DMO True 2-Slot**
 In direct mode Hytera can provide 2-slot communication, which allows for 2 talk paths on 1 frequency. See example below.



Solt 1, Solt 2 are automatically assigned to voice call 1 or voice call 2.



Solt 1 used for voice call , Solt 2 used for voice call 2

Accessories

Included

- Li-Ion Battery
- MCU Rapid-rate Charger
- Power Adapter
- Antenna
- Belt Clip
- Leather Strap

Optional



Remote Speaker Microphone (IP55) SM13M1



MCU Multi Unit Charger (for Thick Batteries) MCA08



Programming Cable (USB Port) PC63



Ex earset with in-Line Microphone EHM18

See website for full list

Specifications

| | | | | |
|----------------|-----------------------|--|---------------|--|
| General | Frequency Range | VHF: 136 - 174MHz UHF: 400 - 470MHz | | |
| | Channel Capacity | 32 | | |
| | Zone Capacity | 3 | | |
| | Channel Spacing | 25 / 20 / 12.5KHz | | |
| | Operating Voltage | 7.4V | | |
| | Battery | 1500mAh (Li-Ion) | | |
| | Battery Life (5/5/90) | Analog | Approx. 11hrs | |
| | | Digital | Approx. 16hrs | |
| | Frequency Stability | ± 0.5ppm | | |
| | Antenna Impedance | 50 Ω | | |
| | Dimensions (HxWxD) | 4.53 x 2.13 x 1.06 inches | | |
| | Weight | 9.17oz | | |
| | FCC ID | 136-174MHz: Pending 400 - 470MHz: YAMPD50XU1 | | |
| | Industry Canada ID | 138-174MHz: Pending 406.1 - 470MHz: 8913A-PD502U1 | | |

| | | |
|-------------------------------------|----------------------------|--|
| Environmental Specifications | Operating Temperature | -22° F ~ +140° F |
| | Storage Temperature | -40° F ~ +185° F |
| | ESD | IEC 61000 - 4 - 2 (level 4) ± 8kV(contact) ; ± 15kV (air) |
| | American Military Standard | MIL-STD-810 C/D/E/F/G |
| | Dust & Water Intrusion | IP54 Standard |
| | Humidity | Per MIL-STD-810 C/D/E/F/G Standard |
| | Shock & Vibration | Per MIL-STD-810 C/D/E/F/G Standard |

| | | |
|--------------------|--|---|
| Transmitter | RF Power Output | VHF: High 5W - Low 1W UHF: High 4W - Low: 1W |
| | FM Modulation (Analog Emissions Designator) | 11K φF3E @ 12.5KHz ; 14KφF3E @ 20KHz ; 16KφF3E @ 25KHz |
| | 4FSK Digital Modulation (Digital Emissions Designator) | 12.5KHz Data Only: 7K6φFXD 12.5KHz Data & Voice: 7K6φFXW |
| | Conducted/Radiated Emission | -36dBm<1GHz -30dBm>1GHz |
| | Modulation Limiting | ± 2.5KHz @ 12.5KHz ; ± 4.0KHz @ 20KHz ; ± 5.0KHz @ 25KHz |
| | FM Hum & Noise | 40dB @ 12.5KHz ; 43dB @ 20KHz ; 45dB @ 25KHz |
| | Adjacent Channel Power | 60dB @ 12.5KHz 70dB @ 20/25KHz |
| | Audio Response | +1 ~ -3dB |
| | Audio Distortion | ≤ 3% |
| | Digital Vocoder Type | AMBE++ or SELP |
| | Digital Protocol | ETSI-TS102 361-1, 2&3 |

| | | | |
|-----------------|--|--|--|
| Receiver | Sensitivity | Analog | 0.22 μ V (12dB SINAD) ; 0.22 μ V (Typical) (12dB SINAD) ; 0.4 μ V (20dB SINAD) |
| | | Digital | 0.22 μ V/BER5% |
| | Selectivity TIA-603 ETSI | 60dB @ 12.5KHz / 70dB @ 20/25KHz 60dB @ 12.5KHz / 70dB @ 20/25KHz | |
| | Intermodulation TIA-603 ETSI | 70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz | |
| | Spurious Response Rejection TIA-603 ETSI | 70dB @ 12.5/20/25KHz 65dB @ 12.5/20/25KHz | |
| | S/N | 40dB @ 12.5KHz ; 43dB @ 20KHz ; 45dB @ 25KHz | |
| | Rated Audio Power Output | 0.5W | |
| | Rated Audio Distortion | ≤ 3% | |
| | Audio Response | +1 ~ -3dB | |
| | Conducted Spurious Emission | < -57dBm | |

Your Local Dealer

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