PD502

Digital Portable Radio

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

PD502

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 wields 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

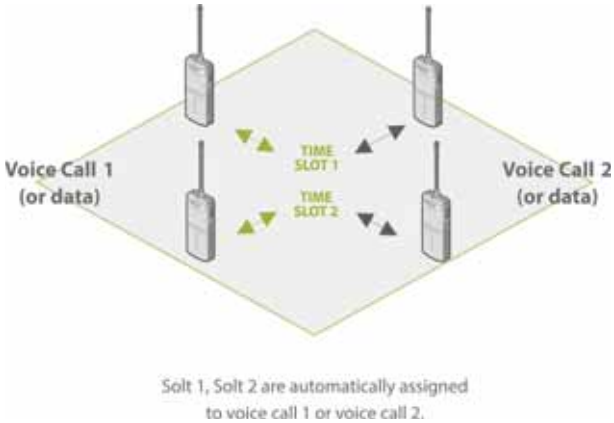
Hotel Education Security Warehouse Retail Events



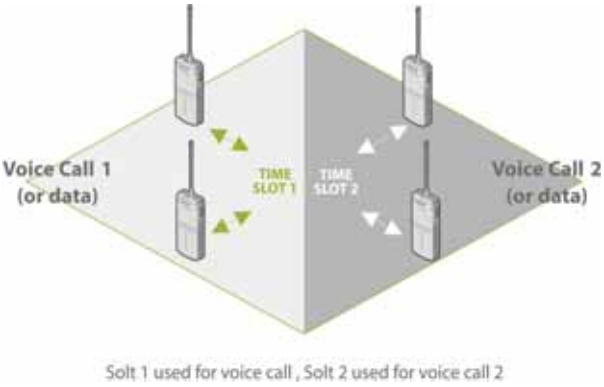



Product Features

- **Smaller, Sleeker, Lighter**
  The size is 4.6 X 2.17 X 1.1 inches, dual-color injection, weight is 9.7oz.
- **Long Battery Life**
  In digital mode, the PD502 works 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

See website for full list

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

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 - 512MHz: 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 fF3E @ 12.5KHz ; 14KfF3E @ 20KHz ; 16KfF3E @ 25KHz
	4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6fFXD 12.5KHz Data & Voice: 7K6fFXW
	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㎶ V (12dB SINAD) ; 0.22㎶ V (Typical) (12dB SINAD); 0.4㎶ V (20dB SINAD)
		Digital	0.22㎶ 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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