

# PD602

Rugged Digital Radio



- Durable and Feature-Rich in an Innovative, Compact Design
- GPS Option and Integration with Data Applications



# PD602

The PD602 is an open-standard DMR radio rich in features for both voice and data communication in a design approved to rigorous IP67 and MIL-STD 810 testing. It is the ideal solution for organizations looking for an affordable migration from analog to digital technology. The Hytera-patented pseudo-trunking maximizes channel usage. The PD602G also comes with an optional GPS chip that allows the radio to integrate with Hytera SmartDispatch or other 3rd party GPS dispatching software.

## Applications

Construction

Education

Hospital

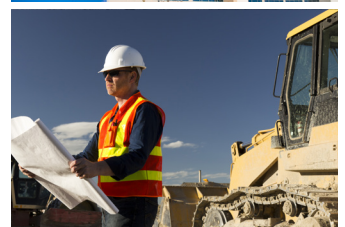
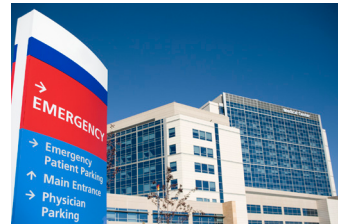
Hotel

Security

Factories

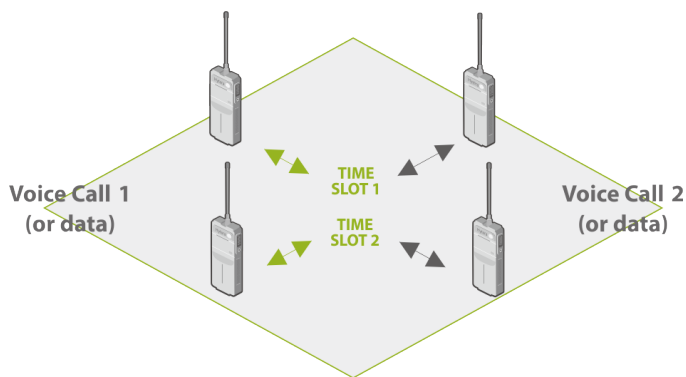
Farming

Forestry

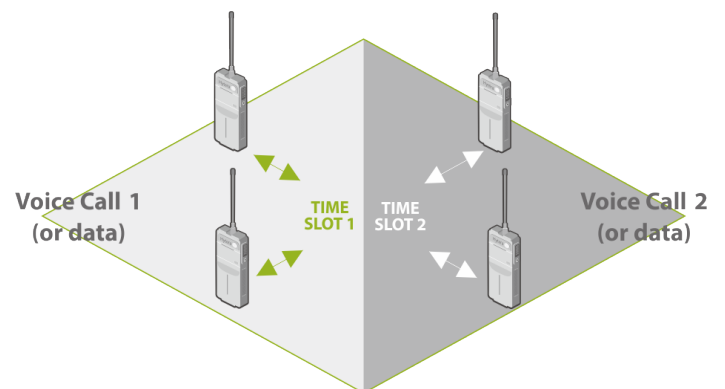


# Product Features

- **Smaller, Sleeker, Lighter**  
The size is 4.7 X 2.13X 1.1 inches, PC & Metal frame, weight is 10.23oz.
- **Rugged & Reliable**  
Complies with MIL-STD-810 C/D/E/F/G standards and passes HALT (Highly Accelerated Life Test).
- **Wider Available Frequency Range**  
Expanded frequency range of 400-527MHz.
- **Dual Mode: Analog & Digital**  
Dual mode (analog & digital) operation ensures a smooth analog to digital migration.
- **Secure Communication**  
Allows basic/advanced digital encryption and Scrambler feature in analog mode.
- **Advanced Signaling**  
Supports multiple advanced analog signaling modes, including HDC1200, 2-Tone and 5-Tone, providing better integration into existing analog radio fleets.
- **DMRA Data Service**  
The data protocol is fully compliant to DMRA standard.
- **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
- **GPS Positioning (Factory Option)**  
The built-in GPS module in the PD602G supports GIS applications.
- **Man Down (Factory Option)**  
When a user falls down, the radio can automatically alert others.
- **Further Development Port**  
The reserved side port allows users or any third party partner to further develop other helpful applications to extend radio functionalities.
- **One Touch Call/Text**  
Supports One Touch features that comprise of Preprogrammed Text Messages, Voice Calls and Supplementary Features.
- **Supplementary Features**  
PD602 can decode radio enable, radio disable, and remoter monitor as well as Priority Interrupt.
- **Radio Priority-Based Interruption**  
Enables an administration or manager radio to interrupt calls for emergency or urgent communication.
- **IP67 Protection**  
The Ingress Protection reaches IP67 (6: Totally protected against dust; 7: Protected against the effects of immersion up to 1m for 30 minutes). It's the highest IP level for land-based wireless radio application.
- **DMO True 2-Slot**  
In Directmode 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

### Optional



Detachable Earpiece with Transparent Acoustic Tube EHN22



MCU Multi-Unit Charger (for Thick Battery) MCA08



Programming Cable (USB Port) PC45



Remote Swivel Earset EHN20

See website for full list

# Specifications

<b>General</b>	Frequency Range	VHF: 136 - 174MHz UHF1: 400 - 527MHz		
	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)	4.7 X 2.13X 1.1 inches		
	Weight	10.23oz		
	FCC ID	136-174MHz: Pending 400 - 512MHz: YAMPD60XUHF		
Industry Canada ID	138-174MHz: Pending 406.1 - 470MHz: 8913A-PD602UHF			

<b>Environmental Specifications</b>	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	IP67 Standard
	Humidity	Per MIL-STD-810 C/D/E/F/G Standard
	Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard

<b>GPS</b>	TTFF (Time To First Fix) Cold Start	<1 minute
	TTFF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<10 meters

<b>Transmitter</b>	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: 7KφFXW
	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

<b>Receiver</b>	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 65dB @ 12.5/20/25KHz	
	Spurious Response Rejection TIA-603 ETSI	70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz	
	Blocking TIA-603 ETSI	90dB 84dB	
	S/N	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz	
	Rated Audio Distortion	≤ 3%	
	Audio Response	+1 ~ -3dB	
	Conducted Spurious Emission	< -57dBm	

## Your Local Dealer



Hytera reserves the right to change product designs or specifications at any time. If you have any questions regarding the accuracy of this information please contact your local sales representative or Hytera directly.

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## Hytera America

Address: 3315 Commerce Parkway  
Miramar, Florida 33025, USA  
Tel: 800-845-1230 Fax: 954-846-1672  
http://www.hytera.us  
Stock Code: 002583.SZ

