Hytera

PD7 Series
Digital Portable Radio

- Superior Digital Audio Clarity and Features
- GPS Option and Integration with Data Applications

PD782

PD702

PD752

DMR DIGITAL MOBILE RADIO ASSOCIATION **RATED IP67**

PD7 Series

The PD7 Series is built to the DMR Standard and is rich in features for both voice and data communication. The design is approved to rigorous IP67 and MIL-STD 810 testing. The Hytera-patented pseudo-trunking maximizes channel usage. Key features such as vibration, a dedicated emergency button, and the large color display make this an ideal solution for mission critical communications. The PD7 Series also comes with an optional GPS chip that allows the radio to integrate with Hytera Dispatch System or other 3rd party GPS dispatching software.

Applications

Public Safety   Utilities   Forestry   Manufacturing   Transportation   Security   Hospital

Product Features

- **User Friendly Design**
  The large-size color display allows good visibility even under extremely strong light. The globally patented industrial design and antenna design ensure convenient operation and remarkable GPS performance.

- **Rugged & Reliable**
  Complies with MIL-STD-810 C/D/E/F/G standards. 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.

- **Superior Voice**
  With the adoption of the AGC technology in combination with the application of narrowband codec and digital error correction technologies, The PD7 Series radios are capable of ensuring your voice is clear and crisp even in noisy environments or at the edge of the coverage area.

- **Higher Spectrum Efficiency, Higher Channel Capacity**
  The TDMA technology allows twice the channels based on the same spectrum resource. This relieves the stress of increasing shortage in spectrum resource.

- **Secure Communication**
  Besides the encryption inherent to digital technology, The PD7 Series radios provide enhanced encryption capabilities (such as 256-bit encryption algorithm). It has analog scrambling, and digital encryption using Advanced Encryption Standard (AES) and ARCFOUR (ARC4) encryption methodology to both voice and data.).

- **Roaming**
  Automatic roaming of all sites in an IP Multi-site Connect system.

- **Vibration**
  Vibration alerts the user of voice calls and text messages.

- **Scan**
  The PD7 Series is capable of scanning analog voice and signaling, as well as digital voice and data. These radios are also capable of mix mode scanning which monitors analog and digital channels.

- **GPS Positioning**
  The PD782G / PD752G supports viewing of GPS positioning information and sending of GPS text message.

- **Dual Mode: Analog & Digital**
  Dual mode (analog & digital) operation ensures a smooth analog to digital migration.

- **Various Analog Signaling Types**
  The PD7 Series is capable of various analog signaling types such as HDC1200, DTMF Encode (PD782), 2-Tone, and 5-Tone, various squelch control types (CTCSS / CDCSS), providing higher functionality in analog mode.

- **Versatile Voice Calls**
  The intelligent signaling of the PD7 Series radios support various voice call types, including Private Call, Group Call , All Call and Emergency Call.

- **Multifaceted Features**
  In addition to conventional communication services, the PD7 Series radios are capable of Text Message, Scan, Emergency, Man Down (optional), Vibration Auto Registration, High-speed Data Transmission, Lone Worker, Radio Check, Remote Monitor, Call Alert, Radio Enable, and Radio Disable.

- **Software Upgradeable**
  Upgradeable software enables new features without buying a new radio; The PD7 Series radios can also be switched into DMR trunking modes with corresponding trunking license applied in the same hardware.

- **Expansion Ports**
  This allows third parties to develop accessory and applications via front and rear port of the mobile. (Features such as voice recording, encryption).

- **One Touch Call/Text**
  Supports One Touch features that comprise of Preprogrammed Text Messages, Voice Calls and Supplementary Features.

- **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.

- **Data Features**
  The PD782 / PD752 Supports data capabilities of sending Private and Group text messages. It also supports a Third Party to control the radio via Third party API (GPS, Radio Registration Services, Radio Call Control, Telemetry, Data Transfer), via Telemetry control to radio.

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 (IP57)
SM18N2

MCU Multi-Unit Charger
(For Thick Battery)
MCA08

Programming Cable
(USB Port)
PC38

Earset
Swivel
EHN17

Specifications

General

Frequency Range (VHF and UHF3 only PD702 / PD782)		VHF: 136 - 174MHz ; UHF1: 400 - 470MHz UHF2: 450-520MHz ; UHF3: 350 - 400MHz UHF5: 806-941MHz (only for DMR Trunking)
Channel Capacity	PD702	32
	PD782 PD762	1024
Zone Capacity (each with a maximum of 16 channels)	PD702	3
	PD782 PD762	64
Channel Spacing		25 / 20 / 12.5KHz
Operating Voltage		7.4V (rated)
Battery		2100mAh (Li-lon)
Battery Life (5-5-90 Duty Cycle, High TX Power) (Range of hrs depends on Frequency and GPS)	Analog	Approx. 8 - 12hrs
	Digital	Approx. 11 - 15hrs
Frequency Stability		± 0.5ppm
Antenna Impedance		50 Ω
Dimensions (HxWxD)	PD702	4.9 x 2.17 x 1.38 inches
	PD782 PD762	4.9 x 2.17 x 1.46 inches
Weight	PD702	11.82 oz
	PD782 PD762	12.52 oz
LCD Display (PD782 / PD762)		160 128 pixels, 65535 colors 1.8 inch, 4 rows
FCC ID		See website for full list
Industry Canada ID		See website for full list

Environmental Specs

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

GPS

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

20KHz / 25KHz will not be available on new equipment in the U.S. after January 1st , 2011

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.

Transmitter

RF Power Output	VHF: High 5W - Low 1W UHF: High 4W - Low: 1W
FM Modulation (Analog Emissions Designator)	11K **f** F3E @ 12.5KHz ; 14K**f** F3E @ 20KHz ; 16K**f** F3E @ 25KHz
4FSK Digital Modulation (Digital Emissions Designator)	12.5KHz Data Only: 7K6 FXD 12.5KHz Data & Voice: 7K6 FXW
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 **m**V (12dB SINAD) ; 0.22 **m**V (Typical) (12dB SINAD); 0.4 **m**V (20dB SINAD)
	Digital	0.22 **m**V/BER5%
Selectivity TIA-603 ETSI		60dB @ 12.5KHz / 75dB @ 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		80dB 84dB
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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