



# Digital Migration Radio PD50X

DMR standard radio, light design,

Clear voice, cost effective.

New Software! TDMA Direct Mode removed—high quality as always!



## Features

### Small, Sleek, Light

The size is 115 X 54 X 27mm, dual-color injection, weight is 260g.

### Long Battery Life

In digital mode, PD50X operates a minimum of 14 hours under a duty cycle of 5-5-90.

### Rugged & Reliable

PD50X complies with MIL-STD-810 C/D/E/F/G and IP54.

### One Touch Call/Text

PD50X supports One Touch Call/Text features to transmit call or text message via the programmed key.

### Supplementary Features (optional)

PD50X supports radio enable, radio disable, remote monitor, alert call and radio check.

### Dual Modes (Analog & Digital)

In Smart Dispatch system or Smart XPT Dispatch system, RRS is used to check if the radio is online.

### Secure Communication

PD50X supports basic encryption in digital mode and scrambler feature in analog mode.

### Advanced Signaling

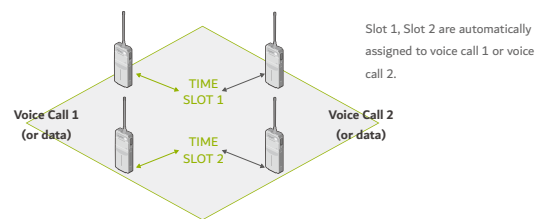
PD50X can transmit various analog signals, including HDC1200, 2-tone and 5-tone, for better communication with analog users.

### DMRA Data Service

The data protocol is fully compliant to DMRA standard.

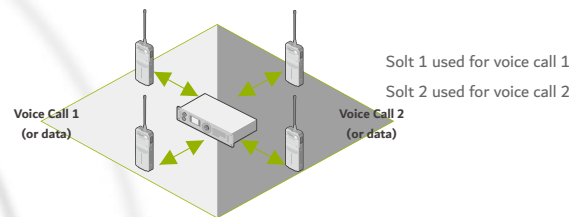
### Pseudo Trunk

The free slot can be allocated to enhance frequency efficiency and timely response under emergency.



### Dual Capacity in TMO

PD50X can work in Hytera XPT Trunking system, which is cost-effective and can dynamically assign voice and data services.



## Highlights

- Ergonomic User-Friendly Design
- Light & Durable
- Compact Size & Clear Voice
- Affordable



## Target Markets

### Retail

Shopping Malls with high noise level require radios with good noise reduction.

### Education

PD50X/56X secures communication via multiple encryption types.

### Security

PD50X secures communication via multiple encryption types.

### Warehouse

The durable battery satisfies full shifts without the need to recharge.

### Hotel

Heavy communication traffic requires more effective use of frequency resources.

### Rent

Business and industry are able to rent Hytera mobiles radios as an alternative to purchasing them.

## Accessories

# Versatile Accessories for Specific Tasks

Adapter PS1018/PS1014

Strap RO03

BL2010 Li-ion battery(2000mAh)

MCA05 Battery optimizing system

CH10A06 Dual Pocket MCU Charger Kit

ESM14 Earbud with On-Mic PTT

EHM15 D-earset with In-line Microphone

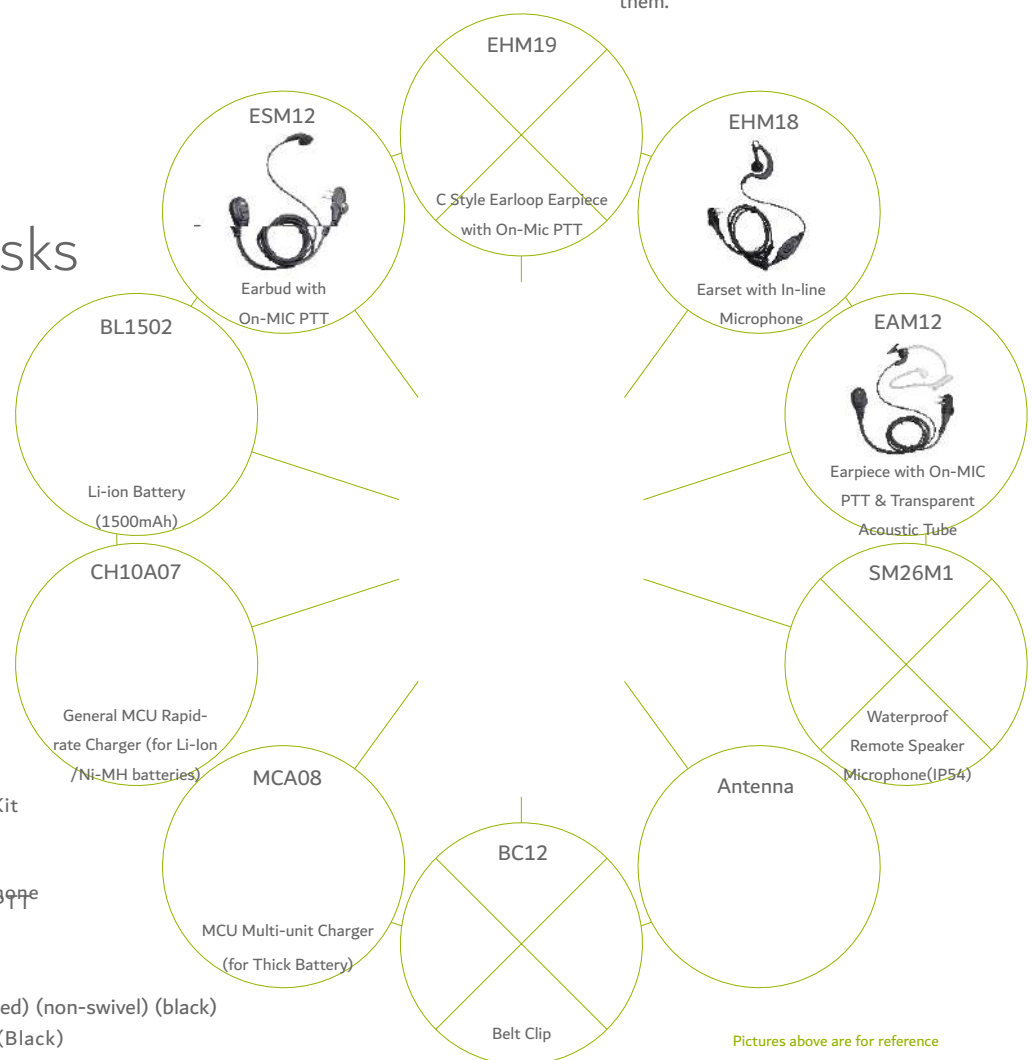
EHM20 Swivel Earpiece with On-Mic PTT

SM08M3 Remote Speaker Microphone

PC63 Data Cable (USB Port)

NCN011 Nylon Carrying Case (half-folded) (non-swivel) (black)

LCBN13 Universal Chest Pack(Nylon)(Black)



Pictures above are for reference

only and may vary from actual products.

# Specifications

General	
Frequency Range	UHF: 350-400MHz,400-470MHz VHF: 136-174MHz
Channel Capacity	256
Zone Capacity	16
Channel Spacing	25/20/12.5KHz
Operating Voltage	7.4V
Battery	1500mAh (Li-Ion)
Battery Life (5/5/90 )	Analog/Digital: 11.5/16 hours(1500mAh) 15.3/20 hours(2000mAh)
Weight	260g
Dimensions	115 x 54 x 27mm
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Receiver	
Sensitivity (Digital)	0.22μV / BER 5%
Sensitivity (Analog)	0.3μV (12dB SIN AD) 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)
Adjacent Selectivity TIA-603 ETSI	60dB @ 12.5KHz/70dB @ 20 & 25KHz 60dB @ 12.5KHz/70dB @ 20 & 25KHz
Spurious Response Rejection TIA-603 ETSI	70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz
Inter-modulation TIA-603 ETSI	70dB @ 12.5/20/25KHz 65dB @ 12.5/20/25KHz
Hum & Noise	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

Transmitter	
RF Power Output	VHF High power: 5W VHF Low power: 1W UHF High power: 4W UHF Low power: 1W
FM Modulation	11K0F3E @ 12.5KHz 14K0F3E @ 20KHz 16K0F3E @ 25KHz
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW
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+2™ or SELP
Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental	
Operating Temperature	-30°C ~ +60°C
Storage Temperature	-40°C ~ +85°C
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)
Dustproof & Waterproof	IP54
Humidity	Per MIL-STD-810 G
Shock & Vibration	Per MIL-STD-810 G

All specifications are subject to change without notice due to continuous development.

PD50X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.



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