

## Accessories



## Optional Accessories



## Specifications

General		Transmitter	
Frequency Range	400-470MHz	RF Power Output	4W/1W
Channel Capacity	256	FM Modulation	16K0F3E @ 12.5 kHz 14K0F3E @ 20 kHz 11K0F3E @ 25 kHz
Zone Capacity	32 (each with a maximum of 16 channels)	4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXE
Channel Spacing	25 /20 / 12.5 KHz	Spurious and Harmonics	-36dBm<1GHz -30dBm>1GHz
Operating Voltage	7.4V (rated)	Modulation Limiting	±2.5kHz @ 12.5 kHz ±4.0kHz @ 20 kHz ±5.0kHz @ 25 kHz
Battery	2000mAh (Li-Ion)	FM Noise	40dB @ 12.5 kHz 43dB @ 20KHz 45dB @ 25 kHz
Battery Life (5-5-90 Duty Cycle, High TX Power)	Analogue: Above 10.5 Hours Digital: Above 14 Hours	Adjacent Channel Power	60dB @ 12.5 kHz 70dB @ 20/25 kHz
High-capacity 2000mAh Li-Ion Battery		Audio Response	+1 ~ -3dB
Frequency Stability	±1.5ppm	Audio Distortion	≤3% (Typical)
Antenna Impedance	50Ω	Digital Vocoder Type	AMBE++ /SELF
Dimensions (W*H*L)	119 X 55 X 33mm / 4.69*2.2*1.3 (inch)	Digital Protocol	ETSI-TS102 361-1.2&3
Weight	320g /11.3oz		
Military Standard	MIL-STD-810C/D/E/F		
Front Case	PC+ABS		
LCD Display	160*128 pixels, 65535 colors		
Receiver		Environmental Specifications	
Sensitivity (Analog)	0.3μV (12dB SINAD) 0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)	Operating Temperature	-30°C ~ +60°C
Sensitivity (Digital)	0.3μV @BER5%	Storage Temperature	-40°C ~ +85°C
Adjacent Channel Selectivity	60dB @ 12.5 kHz/70dB @ 20/25 kHz 60dB @ 12.5 kHz/70dB @ 20/25 kHz	Dust & Water Intrusion	Per MIL-STD-810 C/D/E/F and IP57 Standards
Intermodulation	70dB @ 12.5/20/25 kHz 65dB @ 12.5/20/25 kHz	Shock & Vibration	Per MIL-STD-810 C/D/E/F Standards
Spurious Response Rejection	70dB @ 12.5/20/25 kHz 70dB @ 12.5/20/25 kHz	Humidity	Per MIL-STD-810 C/D/E/F Standards
S/N	40dB @ 12.5 kHz 43dB @ 20 kHz 45dB @ 25 kHz		
Rated Audio Power Output	0.5W		
Rated Audio Distortion	≤3%		
Audio Response	+1 ~ -3dB		
Conducted Spurious Emission	-57 dBm		

All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

### Applicable Military Standards 810 E/F

MIL-STD	810E		810F	
	Method	Procedure	Method	Procedure
Low Pressure	500.3	II	500.4	I
High Temperature	501.3	IA, IIA1	501.4	I/IIA, IIB/A
Low Temperature	900.3	IC3, IIC1	900.4	IC3, IIC1
Temperature Shock	503.3	IA, IC3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.3	I, II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dew	510.3	I	510.4	I
Vibration	514.4	I/10, IIB	514.5	U24
Shock	516.4	I, IV	516.5	I, IV

# Hytera

## DMR

# PD785

## Digital Two-Way Radio

Fully compliant to the DMR standard, the PD785 keeps users well-informed in various scenarios, while offering a solution of efficient real-time communication and fleet management with versatile functionalities. This radio has an ergonomic design and a user-friendly interface. The PD785 is your way of optimizing your organization's efficiency on the job.



www.hytera.cn

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## Product Highlights >>



### Superior Voice

With the combined application of advanced codec and digital error-correction technology, the PD785 is capable of ensuring you superior voice with a wider coverage.

### High Frequency Spectrum Efficiency

Benefiting from TDMA technology, PD785 allows twice the users to share the same channel. This is a big help to relieve the stress of increasing shortage in spectrum resource.

### Durable Battery

Compared with an analog radio, the PD785 can obtain an extra 40% operating time at the same output power.

### Dual Modes

The PD785 can operate in either analog or digital mode. Accordingly, you can get rid of worries about its compatibility with the analog system that you are using, and just enjoy the benefits it brings.

### Secure Communication\*

The PD785 is furnished with an enhanced digital encryption capability. Eavesdropping issues are no longer a problem now that your communications are fully secured.



## IP57

### Ergonomic Design

- Compact and light weight structural design makes the PD785 easy to carry and operate.

- Large-sized HD color LCD display and big push-buttons facilitate your access to various functions.

- The globally patented antenna design ensures convenient operation and remarkable GPS\* performance.

### Reliable Quality

The PD785 is strictly compliant with MIL-STD-810 C/D/E/F and IP57 standards, ensuring outstanding performance in harsh environments.



### Versatile Services

In addition to conventional communication services, PD785 features rich digital services and optional functions such as Message, GPS\*, High-speed Data Transmission\*, Man Down

### Further Development Port

The reserved port in PD785 allows users or any third party to further develop other helpful functions.

## Additional Features >>

- ▶ **Versatile Voice Calls**  
Intelligent signaling of PD785 supports various voice call types, including Individual Call, Group Call, All Call and Late Entry.
- ▶ **Message**  
PD785 supports transmission and reception of short text message and predefined status message.
- ▶ **Emergency**  
PD785 is equipped with multiple emergency alarm methods such as Man Down and Silent Emergency, enabling you to get instant help in case of a critical event.
- ▶ **Scan**  
This function allows you to listen to communication activities on other channels so that you can keep a close track of your team members.
- ▶ **DM & RM Operation Modes**  
RM: radios can communicate with each other via a repeater.  
DM: radios can communicate with each other directly.
- ▶ **Multiple Signalings Available**  
PD785 supports 2-Tone\*, 5-Tone\*, HDC1200\* and CTCSS/CDCSS.
- ▶ **12.5 /20 /25kHz Channel Spacing**
- ▶ **Vibration alert**  
Get voice call and message in time in noisy environment or low volume mode, no information omitted.
- ▶ **Software Upgradable**  
With this function, you can enjoy more powerful features without buying a new machine.

## Industrial Design Features >>

