

Hytera PD795 Ex World's First IIC Intrinsically Safe Digital Portable Radio



PD795 Ex*





Hytera PD795 Ex, fully compliant to DMR open standard of ETSI, comes to be the world's First IIC Atex Digital Portable Radio. FM-2010 standard of North America, IEC, and ATEX standards compliance, plastic-encapsulated technology, error-prevention design, and IP67 protection ensure intrinsically safe and reliable communication in hazardous scenes with explosive gas and combustible dusts.



Innovative Design

- ① Ergonomic Design:
PD795 Ex adopts a 1.8-inch high resolution color transfective LCD display, allowing crystal-clear visibility even under outdoor strong light. Big keypad ensures precise and convenient operation even with gloves on.
- ② Durability:
Strictly compliant with FM -2010 standard of North America, IEC & ATEX standards, PD795 Ex passes one-month series tests in simulated harsh environments. MIL-STD-810C/D/E/F compliance and & IP67 protection ensure outstanding and reliable performance in demanding environments.
- ③ Error-prevention Design:
Automatic alarm will be triggered when batteries or accessories of lower security level are applied, thus avoiding accidents of this kind.
- ④ Plastic-encapsulated technology:
The plastic-encapsulated technology is applied to the radio unit and battery, isolating their internal circuits from dangerous gas and dusts outside. This technology is applied in PD795 Ex at the cost of lower production efficiency due to the challenging demands in design and manufacturing, which is always worthy as Hytera sees it.
- ⑤ IP67 Protection:
One-meter submersion up to 30 minutes.
- ⑥ Anti-static shell:
The rugged and durable shell dissipate static electricity, thus preventing sparks.
- ⑦ High-strength LCD protective len:
The high-strength LCD protective len minimizes scratch and withstands the impact of 1KG hammer.
- ⑧ Innovative battery latch:
The patented battery latch design keeps the battery in place when the radio falls from a height.
- ⑨ Non-slip design:
The non-slip design delivers strong grab-hold, also comfortable operation.

Other features

-  **GPS:**
The built-in GPS module supports GPS data transmission.
-  **Dual-mode (Analog & Digital):**
PD795 Ex operates in either analog or digital mode. It is compatible with the current analog system, ensuring a smooth analog-to-digital migration.
-  **Versatile Voice Calls:**
The DMR intelligent signaling supports various voice calls, including Private Call, Group Call and All Call.
-  **Vibration:**
This feature is helpful in alerting you to reception of any voice call or message under noisy conditions.

* Mode number varies geographically



IP Service:
PD795 Ex allows multiple IP functions when connected with a PC via IP address.



Various Analog Signaling:
PD795 Ex supports various analog signaling (HDC1200、DTMF*、2-Tone* and 5-Tone*), providing more expansion capacity.



Software Upgradable:
Enable new features without buying a new radio.



Multilingual interface:
The radio supports up to 10 languages, including English, Simplified Chinese, German*, Spanish*, French*, Italian*, Polish*, Russian* and Turkish*, allowing you to select as per your needs.

Specifications

General	Frequency Range(MHz)	VHF: 136-174MHz UHF1: 400-470MHz
	Channel Capacity	1024
	Zone Capacity	64(each with a maximum of 16 channels)
	Channel Spacing	25/20/12.5 KHz
	Operating Voltage	7.4V (rated)
	Battery	1800mAh (Li-Ion)
	Battery Life(5-5-90 Duty Cycle, High TX Power)High-capacity 2000mAh Li-Ion Battery	Analog: Above 10.5 Hours Digital: Above 14 Hours
	Frequency Stability	±1.5ppm
	Antenna Impedance	50 Ω
	Dimensions (H×W×D) (with standard battery, without antenna)	141X55 X 39 mm
	Weight(with antenna & standard battery)	550g
	LCD display	160 X 128 pixels,65535 color1.8-inch,up to characters

Receiver	Sensitivity	Analog	0.3 μV (12dB SINAD) 0.22 μV (Typical) (12dB SINAD) 0.4 μV (20dB SINAD)
		Digital	0.3 μV / BER5%
	Selectivity TIA-603 ETSI		60dB @ 12.5 kHz / 70dB @ 20&25 kHz 60dB @ 12.5 kHz / 70dB @ 20&25 kHz
	Intermodulation TIA-603 ETSI		70dB @ 12.5/20/25 kHz 65dB @ 12.5/20/25 kHz
	Spurious Response Rejection TIA-603 ETSI		70dB @ 12.5/20/25 kHz 70dB @ 12.5/20/25 kHz
	S/N		40dB @ 12.5 kHz 43dB @ 20KHz 45dB @ 25 kHz
	Rated Audio Power Output	0.5W	
	Rated Audio Distortion	≤3%	
	Audio Response	+1 ~ -3dB	
	Conducted Spurious Emission	< -57 dBm	

Transmitter	RF Power Output	1W
	FM Modulation	11K Φ F3E @ 12.5 kHz 14K Φ F3E @ 20 kHz 16K Φ F3E @ 25 kHz
	4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD 12.5kHz Data & Voice: 7K60FXW
	Conducted/Radiated Emission	-36dBm<1GHz -30dBm>1GHz
	Modulation Limiting	± 2.5kHz @ 12.5 kHz ± 4.0kHz @ 20 kHz ± 5.0kHz @ 25 kHz
	FM Noise	40dB @ 12.5 kHz 43dB @ 20KHz 45dB @ 25 kHz
	Adjacent Channel Power	60dB @ 12.5 kHz 70dB @ 20/25 kHz
	Audio Response	+1 ~ -3dB
	Audio Distortion	≤3%
	Digital Vocoder Type	AMBE++ or SELP
	Digital Protocol	ETSI-TS102 361-1, 2&3

Environmental Specifications	Operating Temperature	-20℃ ~ +50℃
	Storage Temperature	-40℃ ~ +85℃
	ESD	IEC 61000-4-2 (level 4) ±8kV (contact) ±15kV (air)
	American Military Standard	MIL-STD-810 C/D/E/F
	Dust & Water Intrusion	IP67 Standard
	Humidity	Per MIL-STD-810 C/D/E/F Standard
	Shock & Vibration	Per MIL-STD-810 C/D/E/F Standard

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

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



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