

## Hytera Digital Portable Radio Specification Comparison



SPECIFICATION	PD362	PD662	PD702
<b>General</b>			
Frequency Range			VHF: 136 - 174MHz
	UHF: 400 - 440 MHz	VHF: 136 - 174 MHz	UHF1: 400 - 470MHz
	430 - 470 MHz	UHF: 400 - 527 MHz	UHF2: 450 - 520 MHz
			UHF5: 806 - 941 MHz
Channel Capacity	256	1024	1024
Zone Capacity	3	64	64
Channel Spacing	25 / 12.5 kHz	25 / 20 / 12.5 kHz (analog)	25 / 20 / 12.5 kHz (analog)
		12.5 kHz (digital)	
Operating Voltage	3.7 V	7.4 V	7.4 V
Battery	2000 mAhr (Li-Ion)	1500 mAhr (Li-Ion)	2000 mAhr (Li-Ion )
Battery Service Life (5/5/90)	approx. 10 hrs (analog)	approx. 11 hrs (analog)	approx. 8 - 12hrs (analog)
	approx. 12 hrs (digital)	approx. 16 hrs (digital)	approx. 11 - 15hrs (digital)
Frequency Stability	±0.5 ppm	±0.5 ppm	±0.5 ppm
Antenna Impedance	50 Ω	50 Ω	50 Ω
Dimensions (HxWxD)	4.8 x 2.2 x 0.9 inches	4.8 x 2.2 x 1.1 inches	4.9 x 2.2 x 1.4 inches
Weight	5.6 oz	10.2 oz	11.8 oz

<b>Transmitter</b>			
RF Power Output	UHF: High 3W - Low 1.5W	VHF: High 5W - Low 1W	VHF: High 5W - Low 1W
		UHF: High 4W - Low 1W	UHF: High 4W - Low: 1W
FM Modulation	11K F3E at 12.5 kHz	11KΦF3E at 12.5 kHz	11KΦF3E at 12.5 kHz
(Analog Emissions Designator)		14KΦF3E at 20 kHz	14KΦF3E at 20 kHz
	16K F3E at 25 kHz	16KΦF3E at 25 kHz	16KΦF3E at 25 kHz
4FSK Digital Modulation	12.5 kHz (data only): 7K60FXD	12.5 kHz (data only): 7K6ΦFXD	12.5 kHz (data only): 7K6 FXD
(Digital Emissions Designator)	12.5 kHz (voice & data): 7K60FXW	12.5 kHz (voice & data): 7K6ΦFXW	12.5 kHz (voice & data): 7K6 FXW
Conducted/Radiated Emission	-36 dBm < 1 GHz	-36 dBm < 1 GHz	-36 dBm < 1 GHz
	-30 dBm > 1 GHz	-30 dBm > 1 GHz	-30 dBm > 1 GHz
Modulation Limiting	±2.5 kHz at 12.5 kHz	±2.5 kHz at 12.5 kHz	±2.5 kHz at 12.5 kHz
		±4.0 kHz at 20 kHz	±4.0 kHz at 20 kHz
	±5.0 kHz at 25 kHz	±5.0 kHz at 25 kHz	±5.0 kHz at 25 kHz
FM Hum & Noise	40 dB at 12.5 kHz	40 dB at 12.5 kHz	40 dB at 12.5 kHz
		43 dB at 20 kHz	43 dB at 20 kHz
	45 dB at 25 kHz	45 dB at 25 kHz	45 dB at 25 kHz
Audio Response	+1 dB to -3 dB	+1 dB to -3 dB	+1 dB to -3 dB
Audio Distortion	≤ 3%	≤ 3%	≤ 3%
Digital Vocoder Type	AMBE++ or SELP	AMBE++ or SELP	AMBE++ or SELP
Digital Protocol		ETSI-TS102 361-1, 2&3	ETSI-TS102 361-1, 2&3
<b>Receiver</b>			
Sensitivity (analog)	0.22 μV (12 dB SINAD)	0.22 μV (12 dB SINAD)	0.3 μV (12 dB SINAD)
	0.22 μV (typical) (12 dB SINAD)	0.22 μV (typical) (12 dB SINAD)	0.22 μV (typical) (12 dB SINAD)
	0.4 μV (20 dB SINAD)	0.4 μV (20 dB SINAD)	0.4 μV (20 dB SINAD)
Sensitivity (digital)	0.22 μV / BER 5%	0.22 μV / BER 5%	0.3 μV / BER 5%
Adjacent Channel Selectivity			
TIA-603	60 dB at 12.5 kHz / 70 dB at 25 kHz	60 dB at 12.5 kHz / 70 dB at 20 / 25 kHz	60 dB at 12.5 kHz / 70 dB at 20 / 25 kHz
ETSI	60 dB at 12.5 kHz / 70 dB at 25 kHz	60 dB at 12.5 kHz / 70 dB at 20 / 25 kHz	60 dB at 12.5 kHz / 70 dB at 20 / 25 kHz
Intermodulation			
TIA-603	70 dB at 12.5 / 25 kHz	70 dB at 12.5 / 20 / 25 kHz	70 dB at 12.5 / 20 / 25 kHz
ETSI	70 dB at 12.5 / 25 kHz	70 dB at 12.5 / 20 / 25 kHz	65 dB at 12.5 / 20 / 25 kHz
	40 dB at 12.5 kHz	40 dB at 12.5 kHz	

Spurious Response Rejection		43 dB at 20 kHz	
	45 dB at 25 kHz	45 dB at 25 kHz	
Nominal Audio Power Output	0.4 W	0.5 W	0.5 W
Nominal Audio Distortion	≤ 5 %	≤ 3 %	≤ 3%
Audio Response	+1 dB to -3 dB	+1 dB to -3 dB	+1 dB to -3 dB
Conducted Spurious Emissions	< -57 dBm	< -57 dBm	< -57 dBm
<b>Environmental Specs</b>			
Operating Temperature Range	-30 °C to +60 °C	-30 °C to +60 °C	
Storage Temperature Range	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +185 °C
ESD	IEC 61000-4-2 (level 4)	IEC 61000-4-2 (level 4)	IEC 61000-4-2 (level 4)
	±8 kV (contact discharge)	±8 kV (contact discharge)	±8 kV (contact discharge)
	±15 kV (air discharge)	±15 kV (air discharge)	±15 kV (air discharge)
Dust and Moisture Protection	IP54	IP67	IP67
Shock & Vibration	MIL-STD-810 C/D/E/F/G	MIL-STD-810 C/D/E/F/G	Per MIL-STD-810 C/D/E/F/G
Relative Humidity	MIL-STD-810 C/D/E/F/G	MIL-STD-810 C/D/E/F/G	Per MIL-STD-810 C/D/E/F/G
<b>GPS</b>			
TTF (cold start)		< 1 minute	< 1 minute
TTF (warm start)		< 10 seconds	< 10 seconds
Horizontal Accuracy		< 10 meters	< 10 meters