

PD755/PD755G

DMR handheld radio



Robust DMR handheld radio

The PD755/PD755G rounds out the established PD7 series of professional DMR handheld radios from Hytera. In order to provide ideal support in daily work flows, the radio is furnished with an LCD display and a keypad with programmable keys.

Supports digital and analog operating modes

The PD755 PD755G has an analog mode and a digital mode and is compatible with analog radio systems, making it very easy for you to switch to the digital age. Along with conventional DMR (DMR Tier II), the radios also support analog trunked radio as per MPT1327 and DMR trunked radio. In addition, they can be used in Hytera XPT and simulcast systems.

User-Friendly Design

The PD755/PD755G impresses with its user-friendly design, excellence balance and wide range of functions.

Technical Data PD755/PD755G

General data	
Frequency range	VHF: 136 – 174 MHz UHF: 400 – 470 MHz
Supported operating modes	<ul style="list-style-type: none"> ▪ DMR Tier II (ETSI TS 102 361-1/2/3) ▪ Simulcast ▪ XPT Digital Trunking ▪ DMR Tier III (ETSI TS 102 361-1/2/3/4) ▪ Analog, MPT 1327
Number of channels	1024
Number of zones	64
Channel spacing	12.5 / 20 / 25 kHz (analog) 12.5 kHz (digital)
Operating voltage	7.4 V (nominal)
Standard battery	2000 mAh (lithium-ion battery)
Battery service life, analog (5-5-90 duty cycle, high transmitting power, standard battery)	VHF: approx. 11 hours / 10 hours (GPS mode) UHF: approx. 13.5 hours / 12 hours (GPS mode)
Battery service life, digital (5-5-90 duty cycle, high transmitting power, standard battery)	VHF: approx. 13.5 hours / 12 hours (GPS mode) UHF: approx. 15.5 hours / 14 hours (GPS mode)
Frequency stability	± 1.5 ppm
Antenna impedance	50 Ω
Dimensions (H x W x D, without antenna)	125 x 55 x 35 mm
Weight (with antenna and standard battery)	355 g
LCD display	160 x 128 pixels, 65,536 colors, 1.8 inches, 4 rows

Environmental conditions	
Operating temperature range	-30 °C to +60 °C
Storage temperature range	-40 °C to +85 °C
ESD	IEC 61000-4-2 (Level 4), ± 8 kV (contact), ± 15 kV (air)
Protection against dust and moisture	IP67
Shock and vibration resistance	MIL-STD-810 C / D / E / F / G
Relative humidity	MIL-STD-810 C / D / E / F / G

GPS (PD755G only)	
Time to first fix (TTFF)	< 1 minute (cold start) < 10 seconds (warm start)
Horizontal accuracy	< 10 meter

Transmitter	
Transmitting power	VHF: 1 / 5 W UHF: 1 / 4 W
Modulation	11 K0F3E at 12.5 kHz 14 K0F3E at 20 kHz 16 K0F3E at 25 kHz
4FSK digital modulation	12.5 kHz (data only): 7K60FXD 12.5 kHz (data and voice): 7K60FXW
Interfering signals and harmonics	- 36 dBm (< 1 GHz) - 30 dBm (> 1 GHz)
Modulation limiting	±2.5 kHz at 12.5 kHz ±4.0 kHz at 20 kHz ±5.0 kHz at 25 kHz
Noise cancellation	40 dB at 12.5 kHz 43 dB at 20 kHz 45 dB at 25 kHz
Adjacent channel selectivity	60 dB at 12.5 kHz 70 dB at 20 / 25 kHz
Audio sensitivity	+ 1 dB to - 3 dB
Nominal audio distortion	≤ 3 %
Digital vocoder type	AMBE +2™

Receiver	
Sensitivity (analog)	0.3 µV (12 dB SINAD) 0.22 µV (typical) (12 dB SINAD) 0.4 µV (20 dB SINAD)
Sensitivity (digital)	0.3 µV / BER 5 %
Adjacent channel selectivity TIA-603	60 dB at 12.5 kHz / 70 dB at 20 and 25 kHz
ETSI	60 dB at 12.5 kHz / 70 dB at 20 and 25 kHz
Intermodulation TIA-603	70 dB at 12.5 / 20 / 25 kHz
ETSI	65 dB at 12.5 / 20 / 25 kHz
Spurious response rejection TIA-603	70 dB at 12.5 / 20 / 25 kHz
ETSI	70 dB at 12.5 / 20 / 25 kHz
Signal-noise ratio (S/N)	40 dB at 12,5 kHz 43 dB at 20 kHz 45 dB at 25 kHz
Nominal audio power output	0.5 W
Nominal audio distortion	≤ 3 %
Audio sensitivity	+ 1 dB to - 3 dB
Conducted spurious emission	< - 57 dBm

All technical information was determined at the factory and in accordance with the corresponding standards. Subject to change on the basis of continuous development.



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