



PD6 Series

DMR handheld radios

The PD6 series from Hytera brings a breath of fresh air into your radio communication. With its lightweight metal cases and the support of digital and analog mobile radio, the handheld radios of the PD6 series are the ideal companion for migrating to digital mobile radio.



Radios

PD6 Series

PD605

PD665

PD685

DMR handheld radios



Highlights

Small, lightweight and narrow

The radios of the PD6 series are only 27 mm deep, making them particularly compact. The chassis are encased in a high-quality aluminum metal frame and with a weight of only 290 g (PD605) or 310 g (PD655/PD685) comfortable and easy to carry for long operations.

Long battery service life

With the lithium-ion battery with 1500 mAh, the handheld radios of the PD6 series achieve an operating time in digital operation of at least 16 hours. With the 2000-mAh battery, it will even be 20 hours.

Improved utilization of the frequency spectrum

The PD6 series can be operated in TDMA Direct Mode and Pseudo Trunk. This assignment of the available bandwidth with double the number of channels leads to a significant easing of the increasing shortage of frequencies in the operation of DMR mobile radio systems compared to analog mobile radio systems.

Expanded frequency range

The frequency range in UHF stretches from 400 MHz to 527 MHz.

Versatile - supports digital and analog operating modes

The radios in the PD6 series possess both an analog mode and a digital mode and are compatible with analog radio systems; as a consequence it is very easy for you to change to the digital age.

Along with conventional DMR (DMR Tier II), the radios also support DMR trunked radio. In addition, they can be used in Hytera XPT and simulcast systems.

Additional Functions (selection)

- Every radio of the PD6 series is also available with GPS. Variants with GPS support GIS applications, such as AVL and telemetry.
- Encryption with the encryption algorithm ARC4 (40 bit) in accordance with DMRA or with optional algorithms AES128 and AES256 (128 and 256 bit)
- Expansion interface for applications
- Man-down function (optional)
- Leasing function
- Versatile voice calls: Individual call, group call, broadcast call, emergency call



Small and lightweight, robust chassis with metal frame

Multifaceted accessories available for every operation



Dust and water-proof radios in accordance with IP67

Correspond to US Military Standard MIL-STD-810 C/D/E/F/G

Accessories available

Lithium-ion battery (1500 mAh) BL1502	Lithium-ion battery (2000 mAh) BL2010	Various antennae (UHF or VHF)	Wireless headset ESW01	Loudspeaker microphone SM26N1	Earphone with C-clip EHN20
Carrying case (nylon) NCN011	Belt clip BC19	Programming cable PC45	Switching power adapter for charger PS1018	6-unit charger MCA08	Quick charger CH10A07

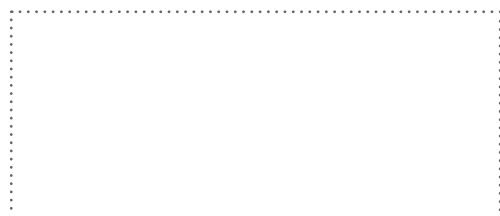
Technical Data

General data	
Frequency range	VHF: 136 – 174 MHz UHF: 400 – 527 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
Number of channels	1024
Number of zones	3 (PD605), 64 (PD665 / PD685)
Channel spacing	12.5 / 20 / 25 kHz (analog) 12.5 kHz (digital)
Operating voltage	7.4V (nominal)
Batteries available	1500 mAh (lithium-ion battery) 2000 mAh (lithium-ion battery)
Battery service life (5-5-90 duty cycle, high transmitting power)	approx. 11 hours (analog) approx. 16 hours (digital) with 1500 mAh approx. 20 hours (digital) with 2000 mAh
Frequency stability	± 0.5 ppm
Antenna impedance	50 Ω
Dimensions (H × B × T) (without antenna)	119 × 54 × 27 mm (PD605) 122 × 54 × 27 mm (PD665 / PD685)
Weight (with antenna and standard battery)	approx. 290 g (PD605) approx. 310 g (PD665 / PD685)
Programmable keys	1 (PD605) 6 (PD665) 3 (PD685)
LCD display (PD665 / PD685)	160 × 128 pixels, 65,536 colors, 1.8 inch, 4 lines
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 (optional)	
Time to first position recognition (TTFF) cold start	< 1 minute
Time to first position recognition (TTFF) warm start	< 10 seconds
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
Hum and noise	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
Audio distortion	≤ 3 %
Digital vocoder type	AMBE +2™
Receiver	
Sensitivity (analog)	0.22 µV (12 dB SINAD) 0.22 µV (typical) (12 dB SINAD) 0.4 µV (20 dB SINAD)
Sensitivity (digital)	0.22 µV / BER 5 %
Adjacent channel selectivity TIA-603 ETSI	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 ETSI	70 dB at 12.5 / 20 / 25 kHz 65 dB at 12.5 / 20 / 25 kHz
Spurious response rejection TIA-603 ETSI	70 dB at 12.5 / 20 / 25 kHz 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
Audio power output	0.5 W
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.

Your Hytera partner:



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Encryption features are optional and have to be configured separately; they are also subject to German and European export regulations.

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