Hytera
Respond & Achieve

PD5 Series

DMR handheld radios

The PD5 series from Hytera convinces with its compact design, scope of functions and high cost efficiency. With the support of digital and analog mobile radio, the PD5 series is your perfect companion for entering the professional digital mobile radio.

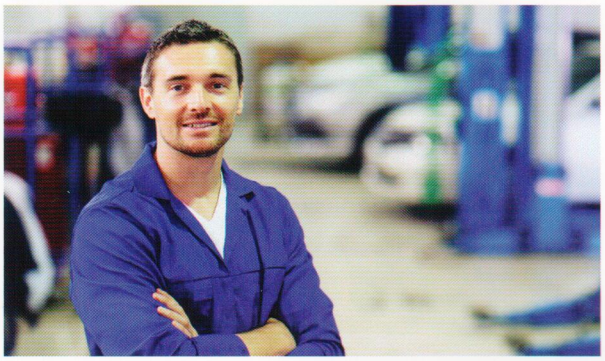
DMR
DIGITAL MOBILE RADIO ASSOCIATION

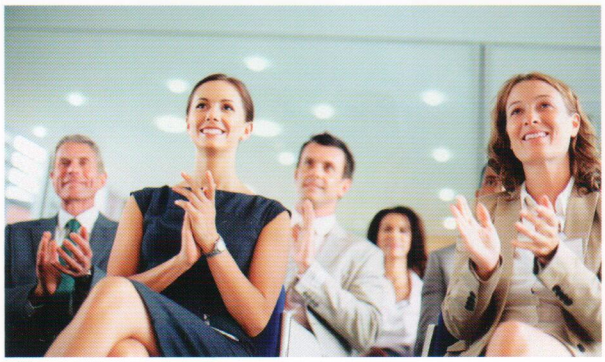
www.hytera-mobilfunk.com

Radios

PD5 Series

PD505
PD565
DMR handheld radios





Highlights

Compact, lightweight and easy to operate
The handhelds of the PD5 series are particularly ergonomic and easy to operate. With a weight of only 260 g (PD505) or 280 g (PD565), the PD5 series offers a high level of mobility comfort.

Cost-efficient with superlative voice quality
With the combined application of the narrow-band codec and digital technologies for error correction, the PD5 series ensures a superlative voice quality even in loud environments or in peripheral areas of the radio coverage.

Long battery service life
The lithium-ion battery (1500 mAh) included in the scope of delivery achieves an operating time of at least 16 hours (operating cycle 5-5-90). With the optionally available 2000-mAh battery, it will even be 20 hours.

Support of analog and digital mobile radio
The PD5 series was developed in compliance with the ETSI mobile radio standard Digital Mobile Radio (DMR). The handheld radios support the conventional DMR operation and can also be operated in analog mode. That makes the handhelds of the PD5 series the ideal companion for the move to digital mobile radio.

Pseudo trunked radio
With the patented pseudo trunked radio, the radios dynamically utilize the timeslots of a frequency. As a result, they can utilize both timeslots in DMO and RMO mode in the conventional DMR operation. This guarantees an efficient frequency utilization.

Additional functions (selection)

- One-touch functions which allows quick call up of preprogrammed text messages, voice calls and supplementary functions
- Support of several expanded analog signal modes, including HDC1200, 2-tone and 5-tone, for an improved integration in existing analog mobile radio fleets
- Hytera basic encryption (40 bit) in digital operation
- Scrambler function in analog operation
- Leasing function
- Versatile voice calls: Individual call, group call, broadcast call, data call
- Priority Interrupt and Remote Monitor function (optional)

Battery service life of 16 hours (1500-mAh battery) and 20 hours (2000-mAh battery) in digital operation

Ergonomic and lightweight housing

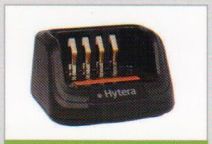
High cost efficiency

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

Standard scope of delivery


Lithium-ion battery (1500 mAh) BL1502

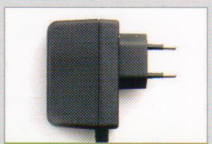

Standard antenna (UHF or VHF)



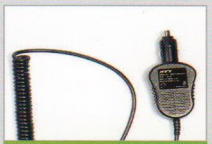
Quick charger CH10A07

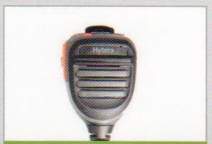

Hand strap RO03


Belt clip BC12


Switching power adapter for charger PS1018

Additional accessories (selection)


Vehicle power adapter CHV09


Loudspeaker microphone SM26M1


Earphone ESM12


Lithium-ion battery (2000 mAh) BL2010


6-unit charger MCA08


Carrying case (nylon) NCN011

The illustrations are for reference purposes only. The products might differ from these illustrations.

Technical Data

General data	
Frequency range	VHF: 136 – 174 MHz UHF: 400 - 470 MHz
Supported operating modes	• DMR Tier II in acc. with ETSI TS 102 361-1/2/3 • Simulcast • Analog
Channel capacity	32 (PD505) / 512 (PD565)
Zone capacity	3 (PD505) / 32 (PD565)
Channel spacing	12.5 / 20 / 25 kHz (analog) 12.5 kHz (digital)
Operating voltage	7.4 V (nominal)
Standard battery	1500 mAh (lithium-ion battery)
Battery service life (5-5-90 operating cycle, high transmitting power, standard battery)	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)	115 × 54 × 27 mm (PD505) 115 × 54 × 30 mm (PD565)
Weight (with antenna and standard battery)	approx. 260 g (PD505) approx. 280 g (PD565)
Programmable keys	1 (PD505) 6 (PD565)
LCD display (PD565)	160 × 128 pixels, 65,536 colors, 1.8 inch, 3 lines

Ambient data	
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)
Dust and water protection	IP54
Shock and vibration resistance	MIL-STD-810 C/D/E/F/G
Relative humidity	MIL-STD-810 C/D/E/F/G

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 at - 3 dB
Nominal 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
Hum and noise	40 dB at 12.5 kHz 43 dB at 20 kHz 45 dB at 25 kHz
Audio power output	0.5 W
Nominal audio distortion	≤ 3%
Audio sensitivity	+ 1 dB at - 3 dB
Conducted spurious emission	< - 57 dBm

All technical specifications were tested according to the relevant standards.
Subject to change on the basis of continuous development.

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Hytera
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