Hytera
Respond & Achieve



PD6 Series

DMR handheld radios



The PD6 Series from Hytera offers a sleek, innovative handset for professional radio users. With a lightweight, crafted metal design, supporting both digital and analgoue technology, the PD6 Series is a popular feature rich device.

DMR
DIGITAL MOBILE RADIO ASSOCIATION

www.hytera.co.uk

Radios

PD6 Series

PD605 / PD605G
PD665 / PD665G
PD685 / PD685G
DMR handheld radios









Highlights

Refined and lightweight

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

Longer battery life

With the 1500 mAh standard lithium-ion battery, the PD6 series handsets can achieve an operating time in digital mode of at least 16 hours. With the optionally available 2000-mAh battery, this could be up to 20 hours.

The PD6 series can be operated in TDMA Direct Mode and Pseudo-Trunk mode. 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 analogue mobile radio systems.

Expanded frequency range

The frequency range in UHF is offered from 400 MHz to 527 MHz.

Support of analogue and digital mobile radio

The PD6 series was developed in compliance with the ETSI DMR standard. Digital Mobile Radio (DMR). The handheld radios support the conventional DMR operation and can also be used in analogue mode. This makes the terminals of the PD6 series the ideal companion for the migration to digital mobile radio.

Sytem solution for larger networks

In addition to conventional DMR (DMR Tier II) and analogue modes, all PD6 radios support operation in DMR trunked (Tier III), XPT digital trunking and MPT 1327.

Additional Functions

- Every radio of the PD6 series is also available with GPS (denoted by the model number followed by a ‘G’). Variants with GPS support GIS applications such as AVL, telemetry and also include a Man Down function
- 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
- Priority interupt
- Leasing function
- Versatile voice calls: Individual call, group call, broadcast call, emergency call
- Bluetooth accessories available with optional adapter
- Roaming

Small and lightweight, robust chassis with metal frame

Multifaceted accessories available for every operation



PD605 / PD605G

PD665 / PD665G

PD685 / PD685G

Dust and water-proof radios in accordance with IP67

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

In the box



Lithium-ion battery (1500 mAh) BL1504



Standard antenna (UHF or VHF)



Rapid-rate charger CH10A07



Hand strap RO03



Belt Clip BC08 (PD605) BC22 (PD665 and PD685)



Switching power adapter for charger PS1044

Optional accessories



Wireless headset ESW01



Loudspeaker microphone SM26N1



Earphone with C-clip EHN20



Lithium-ion battery (2000 mAh) BL2010



6-unit charger MCA08



Carrying case (nylon) NCN011

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

Technical Data

General data	
Frequency range	VHF: 136 – 174 MHz UHF: 400 – 527 MHz
Supported operating modes	• DMR Tier II in acc. with ETSI TS 102 361-1/2/3 • Simulcast • XPT Digital Trunking • Analogue
Channel capacity	1024
Zone capacity	3 (PD605), 64 (PD665 / PD685)
Channel spacing	12.5 / 20 / 25 kHz (analogue) 12.5 kHz (digital)
Operating voltage	7.4 V (nominal)
Standard battery	1500 mAh (lithium-ion battery)
Battery life (5-5-90 duty cycle, high transmitting power, standard battery)	approx. 11 hours (analogue) 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

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	IP67
Shock and vibration resistance	MIL-STD-810 C/D/E/F/G
Relative humidity	MIL-STD-810 C/D/E/F/G

GPS	
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 at - 3 dB
Nominal audio distortion	≤ 3%
Digital vocoder type	AMBE +2™

Receiver	
Sensitivity (analogue)	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 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:

Further information can be found at:
www.hytera.co.uk

Keep up to date with Hytera on social media.

Hytera
Respond & Achieve

Hytera Communications Corporation Limited
Address: Hytera Communications (UK) Co. Ltd.
Hytera House, 939 Yeovil Road, Slough, Berkshire. SL1 4NH, UK.
Tel: +44 (0) 1753 826 120 **Fax:** +44 (0) 1753 826 121
www.hytera.co.uk **info@hyteruk.co.uk**

Hytera reserves the right to modify the product design and the specifications.
In case of a printing error, Hytera does not accept any liability.
All specifications are subject to change without notice.

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

HYT Hytera are registered trademarks of Hytera Communications Corp. Ltd.
© 2017 Hytera Communication Corp., Ltd. All rights reserved.

Ref. no.: PD65_EN_016D_050117

SyncComms