Hytera
Respond & Achieve

PD7 Series

DMR handheld radios

With the PD7 series from Hytera, you can look forward to a quality device from the very beginning. This radio series is impressive, not only because of its durable and reliable design, but also thanks to its outstanding voice characteristics and its comprehensive PMR functionality. Choose the ever-popular PD7 series to meet your communication requirements in all manner of professional applications.

DMR
DIGITAL MOBILE RADIO ASSOCIATION

www.hytera.co.uk

Radios

PD7 Series

PD705/PD705G
PD755/PD755G
PD785/PD785G
DMR handheld radios

Highlights

User-Friendly Design

From the PD705, with its impressive, durable chassis, to the PD785 with its large color display and full keyboard, this series stands out thanks to its user-friendly design and great feature site, ideal to grab and go.

Improved Utilization of the Frequency Spectrum

The PD7 series can be used in Hytera pseudo-trunking mode. This assignment of the available bandwidth, with double the number of channels, leads to more availability within the same assigned frequencies in DMR systems, compared to analogue.

Versatile – Supports Digital and Analogue Operating Modes

The radios in the PD7 series oer both an analogue mode and a digital mode and are compatible with analogue radio systems; therefore migration to digital is made simple with the PD7 series. Along with conventional DMR (DMR Tier II), the radios also support analogue trunked radio as per MPT1327 and DMR trunked radio (Tier III) via chargeable licence. In addition, they can be used in Hytera XPT and simulcast systems.

Additional Functions

— Versatile voice calls: Individual call, group call, broadcast call, emergency call
— Every radio is available as a GPS variant (request the model with a 'G'). Support of
— GIS applications such as AVL and telemetry as well as display of the distance and direction of other GPS radios (PD755G and PD785G).
— Data Services: Text messages, group text messages, control via API
— Encryption with 40 bit as per DMRA, or optionally with 128 and 256 bit.
— Dierent analogue dialing methods: HDC1200, DTMF, 2-tone and 5-tone dialing, squelch method, tone-coded CTCSS / CDCSS
— Emergency calls, Man Down alarm ('G' version only) and lone worker function—
Vibration function
— Supplementary services, radio check, remote monitor, call alert, radio disable/enable
— One-touch functions (incl. text messages, voice calls and supplementary services)
— Scanning (analogue, digital or mixed)
— Automatic cell re-selection (roaming) in IP multi-site systems
— Upgrade software to protect your investment and access the latest features. It is possible to activate other digital and analogue operating modes by changing the firmware software.

Dust and water-proof radios in accordance with IP67

Multifaceted accessories available for every operation

Different menu languages available

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

In the box

BL2008 - Lithium-Ion Battery (2000mAh)

Standard antenna (UHF or VHF)

Rapid-rate charger CH10A07

Optional accessories

Wireless headset ESW01

Remote Speaker Microphone (IP67) SM18N2

Earphone with C-clip EHN20

Hand strap RO03

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

Switching power adapter for charger PS1044

Car Kit with Antenna Adapter (Standard Version) CK03

6-unit charger MCA08

Leather Case with Swivel Belt Clip LCY003

The illustrations above 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 UHF2: 450-520MHz UHF3: 350-400MHz (except PD755)
Supported operating modes	• DMR Tier II (ETSI TS 102 361-1/2/3) • Simulcast • XPT Digital Trunking • DMR Tier III via chargeable licence (ETSI TS 102 361-1/2/3/4) • Analogue, MPT 1327
Channel capacity	256 (128 analogue + 128 digital)
Number of zones	PD705 16 zones (max. 16 channels each) PD755 / PD785 64 zones (max. 256 channels each)
Channel spacing	12.5 / 20 / 25 kHz (analogue) 12.5 kHz (digital)
Operating voltage	7.4 V (nominal)
Standard battery	2000 mAh (lithium-ion battery)
Battery life (analogue) (5-5-90 duty cycle, high transmitting power, standard battery)	VHF: about 11 h / 10 h (GPS operation) UHF: about 13.5 h / 12 h (GPS operation)
Battery service life (digital) (5-5-90 duty cycle, high transmitting power, standard battery)	VHF: about 13.5 h / 12 h (GPS operation) UHF: about 15.5 h / 14 h (GPS operation)
Frequency stability	± 1.5 ppm
Antenna impedance	50 Ω
Dimensions (H x W x D) (without antenna, with standard battery)	125 × 55 × 35 mm (PD705) 125 × 55 × 37 mm (PD755 / PD785)
Weight (with antenna and standard battery)	approx. 335 g (PD705) approx. 355 g (PD755 / PD785)
Programmable keys	PD705 3 PD755 5 PD785 5 + number keys
RLCD display (PD755 / PD785)	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, ± 15kV (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

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:

TELPOST O.K.T.H. www.telpost.com.tr
www.TELSİZDÜNYASI.com

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 (< 1GHz) -30 dBm (> 1GHz)
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 25 kHz
Audio sensitivity	+ 1dB at - 3dB
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 (12 dB SINAD)
Sensitivity (digital)	0.22 µV / BER 5 %
Adjacent channel selectivity TIA-603 ETSI	 60 dB at 12.5 kHz / 70 dB at 25 kHz 60 dB at 12.5 kHz / 70 dB at 25 kHz
Intermodulation TIA-603 ETSI	 70 dB at 12.5 / 25 kHz 65 dB at 12.5 / 25 kHz
Spurious response rejection TIA-603 ETSI	 70 dB at 12.5 / 25 kHz 70 dB at 12.5 / 25 kHz
Signal-to-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
Audio distortion	≤ 3 %
Audio sensitivity	+ 1 dB at - 3dB
Conducted spurious emission	< -57dBm

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

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

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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@hytera.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.

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Ref. no.:PD75_EN_018D_131117