



Radio Communications Supply &  
Installation Specialist

Website

[www.radiotronics.co.uk](http://www.radiotronics.co.uk)

Email

[sales@radiotronics.co.uk](mailto:sales@radiotronics.co.uk)

Telephone Numbers

0345 0 955 955

02087 190 180

Data Sheet

# Digital Migration Radio PD405

Digital voice, louder and clearer  
Analogue & Digital Mixed Channel



## Features

Private call, Group call and All call

Small, Sleek, Light

In digital mode, the radio operates up to 16 hours under a duty cycle of 5-5-90 @1500mAh.

IP55 & MIL-STD-810 C/D/E/F/G standards

Pre-programmed Text Message

Supports one touch pre-programmed text messages and voice calls.

Dual Mode (Analogue & Digital) ensures a smooth migration from analogue to digital.

DMRA Direct Mode TDMA (True 2-slot) supports two voice calls simultaneously.

Voice-operated Transmit (VOX) allows you to trigger the voice transmission by voice directly. You don't need to press the PTT button.

Analogue & Digital Mixed Channel supports automatic detecting of signal type and switching between analogue and digital modes.



## Highlights

- Digital Voice, Louder and Clearer
- Double Channel Capacity
- Analogue & Digital Mixed Channel
- Easy Operation
- Durable, IP55 & MIL-STD-810 C/D/E/F/G standards
- Affordable



## Target Markets



### Construction

At the noisy construction site, a reliable radio with superior voice quality makes all the difference.



### Security

Working wirelessly makes life easier for the security worker which ultimately reduces loss.



### Warehouse

A durable battery supports full shifts without recharge.



### Factory

Military standard and good dust-proof & water-proof rating (IP55) protect the radio from damage in complex environment of factory.

## Standard



Li-ion battery  
(1500mAh)  
BL1504



Belt clip  
BC08



General MCU Rapid-rate Charger  
(for Li-Ion/Ni-MH batteries)  
CH10A07



Short antenna



Switching Power Adapter



Hand strap

## Options



# Specifications

General	
Frequency Range	UHF: 400-470MHz, VHF: 136-174MHz
Channel Capacity	32
Zone Capacity	3
Channel Spacing	25/12.5KHz
Operating Voltage	7.4V
Battery	1500mAh (Li-Ion) 2000mAh (Li-Ion)
Battery Life (5/5/90)	Analog/Digital: 12/16 hours (1500mAh) 16/22 hours (2000mAh)
Weight	270g
Dimensions	112x54x28mm
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Receiver	
Sensitivity (Digital)	0.22μV / BER 5%
Sensitivity (Analog)	0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD) 0.22μV (12dB SIN AD)
Adjacent Selectivity	TIA-603 60dB @ 12.5KHz/70dB @ 25KHz
	ETSI 60dB @ 12.5KHz/70dB @ 25KHz
Spurious Response Rejection	TIA-603 70dB @ 12.5/25KHz
	ETSI 70dB @ 12.5/25KHz
Inter-modulation	TIA-603 70dB @ 12.5/25KHz
	ETSI 65dB @ 12.5/25KHz
Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤3%
Audio Response	+1 ~ -3dB
Conducted Spurious Emission	<-57dBm

Transmitter	
RF Power Output	VHF High power: 5W VHF Low power: 1W UHF High power: 4W UHF Low power: 1W
FM Modulation	11K0F3E @ 12.5KHz 16K0F3E @ 25KHz
4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm <1GHz, -30dBm >1GHz
Modulation Limiting	±2.5KHz @ 12.5KHz ±5.0KHz @ 25KHz
FM Hum & Noise	40dB @ 12.5KHz 45dB @ 25KHz
Adjacent Channel Power	60dB @ 12.5KHz, 70dB @ 25KHz
Audio Response	+1 ~ -3dB
Audio Distortion	≤3%
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1,-2,-3
Environmental	
Operating Temperature	-30°C~ +60°C
Storage Temperature	-40°C~ +85°C
ESD	IEC 61000-4-2 (Level 4) ±8kV (Contact) ±15kV (Air)
Dustproof & Waterproof	Ip55 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard

PD40X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.

All specifications are subject to change without notice due to continuous development.



## Hytera Communications Corporation Limited

**Address:** Hytera House, 939 Yeovil Road, Slough Berkshire. SL1 4NH. United Kingdom

**Tel:** +44 (0) 1753 826 120 **Fax:** +44 (0) 1753 826 121

**Http:** //www.hytera.co.uk **Stock Code:** 002583.SZ

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