

# 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

Support 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.

Analogue & Digital Mixed Channel supports automatically detecting signal type and switching between analogue and digital mode.

## 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 radio with good voice quality and reliable in use can make all the difference.



### Security

Steady wireless signal receiving improves security work performance and 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



## 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)<br>2000mAh (Li-Ion)                                          |
| Battery Life (5/5/90 )      | Analog/Digital:<br>12/16 hours (1500mAh)<br>16/22 hours (2000mAh)             |
| Weight                      | 270g                                                                          |
| Dimensions                  | 112×54×28mm                                                                   |
| Frequency Stability         | ±0.5ppm                                                                       |
| Antenna Impedance           | 50Ω                                                                           |
| Receiver                    |                                                                               |
| Sensitivity (Digital)       | 0.22μV / BER 5%                                                               |
| Sensitivity (Analog)        | 0.22μV (Typical) (12dB SIN AD)<br>0.4μV (20dB SIN AD)<br>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<br>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<br>VHF Low power: 1W<br>UHF High power: 4W<br>UHF Low power: 1W |
| FM Modulation               | 11K0F3E @ 12.5KHz<br>16K0F3E @ 25KHz                                               |
| 4FSK Digital Modulation     | 12.5KHz Data Only: 7K60FXD<br>12.5KHz Data & Voice: 7K60FXW                        |
| Conducted/Radiated Emission | -36dBm <1GHz, -30dBm >1GHz                                                         |
| Modulation Limiting         | ±2.5KHz @ 12.5KHz<br>±5.0KHz @ 25KHz                                               |
| FM Hum & Noise              | 40dB @ 12.5KHz<br>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)<br>±8kV (Contact)<br>±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.



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