



# WP405

## DMR Portable Radio

- Easy to Carry with Rugged Design
- Cost-effective
- Dual Modes(analog & digital)for Smooth Migration
- DMO 2-slot Increases Call Capacity
- User-defined Voice Announcement



# WP405 DMR Portable Radio

## Key Features and Benefits

### • Voice Annunciation

Channel number; zone change will be announced by voice. This helps operation under low visibility. This annunciation can be customized by user.

### • Clear and Loud Voice in Compact Size Device

Good audio quality provided by DMR technology and a 1W high-power loudspeaker. Make it possible to hear loud and clear even in noisy environments.

### • Dual-timeslot Communication in DMO Mode

Provide Direct Mode Operation in 2 slots increasing channel capacity without increasing channel frequency spectrum.

### • Analog, Digital and Mixed Modes

WP405 is able to detect signal type when receiving a call and automatically switch between analog and digital mode. The user can reply during the call hang time using PTT. This feature improves migration from analog to digital.

### • Long Operation Time

TDMA technology and power-saving feature enable the battery to work longer. WP405 with standard 2000mAh battery can work up to 15-18 hours in 5-5-90 mode.

### • Digital Encryption

WP405 supports ARC 40-bit encryption, which guarantees communication safety and improve communication privacy. Encryption function provide further protection against over-the-air interception.

### • Various Digital Signaling

WP405 supports features such as Radio Check, Call Alert, Stun/Revive, Radio Kill, and Remote Monitor, which make the radio management easy.

### • Man Down (optional)

WP405 supports Man Down to guarantee user's safety at all times.

### • Pseudo Trunk

This feature can improve frequency efficiency by allocating the free slot to a member and helps you to communicate timely in an emergency.

All specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

# Specifications

General	
Frequency Range	136-174MHz, 350-400MHz, 400-470MHz, 400-520MHz
Channel Capacity	256
Zone Capacity	16
Channel Spacing	25kHz/12.5kHz(Analog) ; 12.5kHz(Digital)
Operating Voltage	7.4V DC $\pm$ 20%
Battery	2000mAh Li-ion(Standard)
Battery Life	Analog: 15 hours@2000mAh (5-5-90 Duty Cycle, High TX Power)
	Digital: 18 hours @2000mAh
Frequency Stability	$\pm$ 1.5 ppm
Antenna Impedance	50 $\Omega$
Dimension(H·W·D) (with battery, without antenna)	116mm*54mm*31mm
Weight (with standard battery)	280g(2000mAh)
LCD Display	None

Receiver	
Sensitivity Analog	0.22 $\mu$ V@12dB SINAD
Sensitivity Digital	0.22 $\mu$ V@BER5%
Selectivity	60dB@12.5kHz, 70dB@25kHz(TIA-603) 60dB@12.5kHz, 70dB@25kHz(ETSI)
Spurious Response Rejection	60dB@12.5kHz, 70dB@25kHz(TIA-603) 60dB@12.5kHz, 70dB@25kHz(ETSI)
Inter-modulation	70dB@12.5kHz/25kHz(TIA-603) 65dB@12.5kHz/25kHz(ETSI)
Hum and Noise	40dB@12.5kHz, 45dB@25kHz
Rated Audio Power Output	1W@16 $\Omega$
Rated Audio Distortion	$\leq$ 3%(typically)
Audio Response	+1~-3dB
Conducted Spurious Emission	-57dBm@<1GHz, -47dBm@>1GHz

Transmitter	
RF Power Output	VHF:1W/5W; UHF:1W/4W
FM Modulation	11K $\Phi$ F3E@12.5kHz; 16K $\Phi$ F3E@25kHz
4FSK Digital Modulation	7K6 $\Phi$ FXD@Data; 7K6 $\Phi$ FXW@Data+Voice
Modulation Limiting	$\pm$ 2.5kHz@12.5kHz; $\pm$ 5kHz@25kHz
Radiated Spurious Emission	-36dBm < 1GHz, -30dBm > 1GHz
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+2™
Digital Protocol	ETSI-TS102 361-1,-2,-3

Environment Specifications	
Operating Temperature	-30°C~ +60°C
Storage Temperature	-40°C~ +85°C
ESD	IEC610000-4-2(Level4) $\pm$ 4kV(Contact) $\pm$ 8kV(air)

## Standard Accessories



Adaptor



Single Unit Charger



Battery



Belt Clip



Antenna



Strap