



# DP405

## DMR Portable Radio

Easy to Carry with Rugged Design  
Cost-effective without Compromise on Quality  
Dual Modes (analog & digital) for Smooth Migration  
DMO 2-slot Increases Call Capacity  
User-defined Voice Announcement



**KIRISUN DMR Solution  
Delivers Significant Benefits**

**DP405**

# DP405 DMR Portable Radio

## KEY FEATURES

### • 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.

### • DMO Support

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

### • Analog, Digital and Mixed Modes

DP405 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. DP405 with standard 2000mAH battery can work up to 15-18 hours in 5-5-90 mode.

### • Digital Encryption

It 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

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

### • Man Down (optional).

It 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.

## 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)	34.5mm*60mm*130mm
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)
Spurious Response Rejection	60dB@12.5kHz, 70dB@25kHz(ETSI)
Hum and Noise	70dB@12.5kHz/25kHz(TIA-603)
Rated Audio Power Output	70dB@12.5kHz/25kHz(ETSI)
Rated Audio Distortion	40dB@12.5kHz, 45dB@25kHz
Audio Response	1W@ 16 $\Omega$
Conducted Spurious Emission	< 3% (typically)
	+1 ~ -3dB
	-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
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	ABME+2™
Digital Protocol	ETSI-TS102 361-1,-2,-3

### Environment Specifications

Operating Temperature	-30 $^{\circ}$ C ~ +60 $^{\circ}$ C
Storage Temperature	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C
ESD	IEC610000-4-2(Level4)
	$\pm$ 4kV(Contact) $\pm$ 8kV(air)

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

## STANDARD ACCESSORIES



Adaptor



Single Unit Charger



Battery



Belt Clip



Antenna



Strap



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