



# DP480/485

## DMR Portable Radio

Increased Call Capacity with DMO 2-slot Operation

GPS Real Time Location

Secure Communications

Pseudo Trunk

Automatic roaming under IP Multi-site Connection System



**KIRISUN DMR Solution  
Delivers Significant Benefits**

**DP480**

**DP485**

# DP480/485 DMR Portable Radio

## KEY FEATURES AND BENEFITS

### • Analog, Digital and Mixed Modes

DP480/DP485 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 improve migration from analog to digital.

### • DMO Support

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

### • Supplementary Features

DP480 supports radio enable, radio disable, and remote monitor.

### • GPS (Optional)

Integrated GPS enables real-time tracking of radio.

### • 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.

### • Multiple Emergency Alarm Modes

The emergency feature supports multiple alarm modes such as top priority alarm.

### • Roaming

Support roaming while using the radio in an IP site connect system.

### • Programmable Keys for Easy Operation

There are three programmable keys to select most-used features.

### • Pseudo Trunk

Dynamically allocation of slot while using repeater mode. Improve channel utilization providing simultaneous communication in repeater mode.

## STANDARD ACCESSORIES



Adaptor



Single Unit Charger



Battery



Belt Clip



Antenna



Strap



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## SPECIFICATIONS

### General

Frequency Range	136-174MHz, 400-470MHz
Channel Capacity	256
Zone Capacity	16
Channel Spacing	25KHz/12.5KHz(Analog) 12.5KHz(Digital)
Operating Voltage	7.4V DC ±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	±1.5 ppm
Antenna Impedance	50Ω
Dimensions(H-W-D)(with standard battery, without antenna)	36.5mm*61.5mm*132mm(DP485) 36mm*61mm*132mm(DP480)
Weight(with standard battery)	290g(DP485),305g(DP480)

### Receiver

Sensitivity Analog	0.22uV@12dB SINAD
Sensitivity Digital	0.22uV@BER5%
Selectivity	60dB@12.5kHz,70dB@25kHz(TIA-603) 60dB@12.5kHz,70dB@25kHz(ETSI)
Spurious Response Rejection	70dB@12.5kHz/25kHz(TIA-603) 70dB@12.5kHz/25kHz(ETSI)
Hum and Noise	40dB@12.5kHz;45dB@25kHz
Rated Audio Power Output	1W
Rated Audio Distortion	3%(typical)
Audio Response	+1~-3dB
Conducted Spurious Emission	-57dBm@<1GHz,-47dBm@>1GHz

### Transmitter

RF Power Output	5W/1W(VHF) 4W/1W(UHF)
FM Modulation	11KΦF3E@12.5kHz 16KΦF3E@25kHz
4FSK Digital Modulation	12.5kHz Data Only:7K6ΦFXD 12.5kHz Data&Voice:7K6ΦFXW
Modulation Limiting	±2.5kHz@12.5kHz, ±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°C ~ + 60°C
Storage Temperature	-40°C ~ + 85°C
ESD	IEC61000-4-2(Level4) ±4kV(Contact) ±8kV(Air)
Dust & Water Protection	IP54 Standard

### GPS

Accuracy specs are for long-term tracking(5 satellites visible at nominal -130dBm)

TTFF(Time To First Fix) Cold Start	<1 minute
Horizontal Accuracy	10m
TTFF(Time To First Fix) Hot Start	10 seconds

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

**CE ISO9001**

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