



DP580

DMR Portable Radio

Compact & Lightweight

IP66 Water Proof

Secure Communication

Advanced Analog Signaling

Increased Call Capacity with DMO 2-slot Operation



**Kirisun DMR Solution
Delivers Significant Benefits**

DP580 DMR Portable Radio

KEY FEATURES AND BENEFITS

• Compact & Lightweight

The size is 115mm*54mm*34mm and weight is 317g.

• Reliable Design

It is compliant with MIL-STD-810 C/D/E/F/G standards.

• DMO support

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

• Analog, Digital and Mixed Modes

DP580 can 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.

• Secure Communication (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. It also provides AES and DES optionally.

• Various Digital Signaling

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

• Emergency call and Man Down (Optional)

It supports features including Emergency Call and Man Down to guarantee user's safety at all times.

• GPS localization(Optional)

Integrated GPS enables the real time tracking of the mobile working team.

• Advanced analog Signaling

It supports multiple advanced analog signaling, including MDC1200, 2-Tone and 5-Tone and DTMF, providing better integration for existing analog radio fleets.

• Roaming

Automatic roaming helps you to use the radio freely among all sites on a IP Multi-Site Connect system.

SPECIFICATIONS

General

Frequency Range	136-174MHz, 350-400MHz, 400-470MHz
Channel Capacity	256
Zone Capacity	16
Channel Spacing	Analog: 25kHz/12.5kHz, Digital: 12.5kHz
Operating Voltage	DC 7.4V ± 20%
Battery	2000mAh Li-ion (Standard)
Battery Life	Analog: 15 hours @ 2000mAh
(5-5-90 Duty Cycle, High Tx Power)	Digital: 17 hours @ 2000mAh
Frequency Stability	± 0.5ppm
Antenna Impedance	50 Ω
Dimensions (H * W * D) (with standard battery, without antenna)	36.5mm * 62.5mm * 132mm
Weight (with standard battery)	316g (2000mAh)

Receiver

Sensitivity Analog	0.22uV @ 12dB SINAD
Digital	0.22uV @ BER5%
Selectivity	60dB @ 12.5kHz, 70dB @ 25kHz (TIA-603)
TIA-603 ETSI	60dB @ 12.5kHz, 70dB @ 25kHz (ETSI)
Spurious Response Rejection	70dB @ 12.5kHz/25kHz (TIA-603)
TIA-613 ETSI	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	VHF: 1W/5W, UHF: 1W/4W
FM Modulation	11KΦF3E @ 12.5kHz, 16KΦF3E @ 25kHz
4FSK Digital Modulation	7K6ΦFXD @ Data, 7K6ΦFXW @ Data + Voice
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	IEC610000-4-2 (Level 4)
	± 4kV (Contact) ± 8kV (air)
American Military Standard	MIL-STD-810-C/D/E/F/G
Dust & Water Protection	IP66 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard

GPS

Accuracy specs are for long-term tracking 5 satellites visible at nominal -130dBm)	
TTFF (Time To First Fix) Cold Start	< 1 minute
TTFF (Time To First Fix) Hot Start	10 seconds
Horizontal Accuracy	10m

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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