



DP580/DP585 DMR PORTABLE RADIO

- Rugged & Reliable
- Various Digital Signaling
- Secure Communication
- Integrated Bluetooth 5.2



DP580/DP585 DMR Portable Radio

Key Features and Benefits

- **Long Shift Life Battery**

The DP580/585 is designed with power efficiency in mind and optimizes battery consumption to provide up to 15-17 hours operations in 5-5-90 duty cycle mode.

- **1.8" True Color Display (DP580)**

The large-sized,full color,6-lines display enables access to desired information easily even under bright sunlight.



- **Rugged & Reliable**

The DP580/585 is designed based on IP66 standards and meets MIL-STD-810 C/D/E/F/G.

- **Analog, Digital and Mixed Modes**

DP580 and DP585 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.

- **GPS Localization (Optional)**

Integrated GPS enables real time tracking of mobile working team.

- **Emergency Alarms and Man Down**

Emergency Alarms can be sent to other radios via the one touch programmable button and the feature of man down to improve worker safety and emergency response time.

- **Secure Communication**

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 radio management easy.

- **Bluetooth Connectivity (Optional)**

Built-in bluetooth for DP580/585 enables users to communicate with others through a bluetooth earpiece.

- **Roaming**

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

- **Rich Features**

The DP580/585 also supports more features, including AI noise cancellation, AES/DES encryption, transmission interrupt, 5-Tone/DTMF coding and decoding, etc.



Specifications

General	
Frequency Range	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) 2500mAH Li-ion(Optional)
Battery Life (5-5-90 Duty Cycle)	Analog:15 h(DP580), 16h(DP585) Digital:16 h(DP580), 17h(DP585)
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Dimensions(H·W·D)	117.4×54×36mm DP580;
(with standard battery, without antenna)	117.4×54×36mm DP585
Weight (with standard battery)	DP580:320g; DP585:315g

Transmitter	
RF Power Output	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
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

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)
Inter-modulation		70dB@12.5kHz/25kHz(TIA-603) 65dB@12.5kHz/25kHz(ETSI)
FM 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

Environment Specifications	
Operating Temperature	-30°C~ +60°C
Storage Temperature	-40°C~ +85°C
ESD	IEC610000-4-2(Level4) ±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)	<1 minute
Cold Start	
TTFF(Time To First Fix)	10 seconds
Hot Start	
Horizontal Accuracy	10m