



WP580/WP585 PORTABLE RADIO

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



WP580/WP585 DMR Portable Radio

Key Features and Benefits

- **Long Shift Life Battery**

The WP580/585 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 (WP580)**

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



- **Rugged & Reliable**

The WP580/585 is designed based on IP66 standards and meets MIL-STD-810 C/D/E/F/G.

- **Analog, Digital and Mixed Modes**

WP580 and WP585 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 provides basic and advanced encryption (Optional) capability, including ARC4, DES, and AES256 bit encryption, which guarantees communication safety and improves communication privacy. Encryption function provides 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 WP580/585 enables users to communicate with others through a bluetooth earpiece.

- **Enhanced Noise Cancellation**

The WP580/585 is equipped with enhanced noise cancellation to provide clear voice communication, whether the signal is digital or analogue.



Specifications

General	
Frequency Range	136-174MHz, 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(WP580), 16h(WP585) Digital:16 h(WP580), 17h(WP585)
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Dimensions(H·W·D)	117.4×54×36mm WP580;
(with standard battery, without antenna)	117.4×54×36mm WP585
Weight (with standard battery)	WP580:320g; WP585:315g

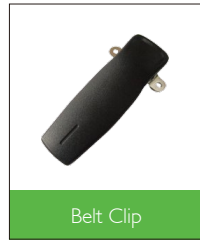
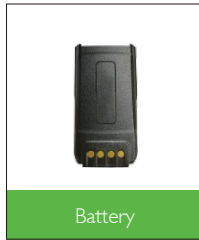
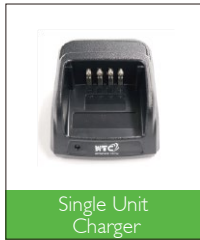
Transmitter	
RF Power Output	VHF :1W/5W; UHF:1W/4W
FM Modulation	11KΦF3E@12.5kHz, 16KΦF3E@25kHz
4FSK Digital Modulation	7K6ΦFXD@Data, 7K6ΦFXW@Data+Voice
Modulation Limiting	±2.5kHz@12.5kHz, ±5kHz@25kHz
Radiated Spurious Emission	-36dBm < 1GHz, -30dBm > 1GHz
FM Hum & Noise	40dB@12.5kHz, 45dB@25kHz
Adjacent 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	0.16uV@12dB SINAD (Typical)
	Digital	0.18uV@BER5% (Typical)
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

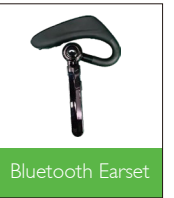
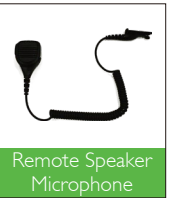
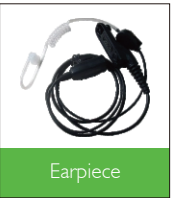
Environment Specifications	
Operating Temperature	-30°C~ +60°C
Storage Temperature	-40°C~ +85°C
ESD	IEC610000-4-2(Level4) ±4kV(Contact) ±8kV(air)
American Military Standard	MIL-STD-810-C/D/E/F/G
Dust & Water Protection	IP66 Standard
Humidity	Per MIL-STD-810 C/D/E/F/G Standard
Shock & Vibration	Per MIL-STD-810 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

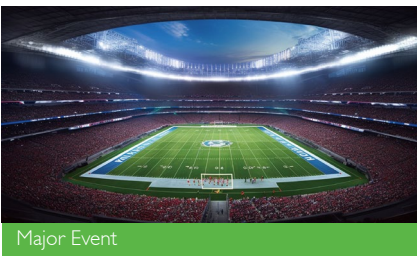
Standard Accessories



Optional Accessories



Application Scenarios



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