



# WP990/WP995

## PORTABLE RADIO

A product with ergonomic design and all round digital functions, WP990/ WP995 helps to improve management efficiency and responsiveness in emergency situations.



# WP990/WP995 DMR PORTABLE RADIO

## KEY FEATURES AND BENEFITS

### • 1.8" Graphic Dot-matrix True Color Display

The large-sized, full color, 5-line display enables access to desired information easily even under bright sunlight.

### • Rugged & Reliable

WP990/WP995 is designed based on IP68 standards and meets MIL-STD-810 C/D/E/F/G, allowing use in harsh environments.

### • Battery Life

2000mAh battery is supplied in the standard package, and operates up to 40% longer in digital mode compared to analog mode. 2500mAh high capacity battery is optional.

### • Extended Development Port

WP990/WP995 reserves optional board interface on radio for any third party to further developing desired functions (such as recording, encryption). The optional board can be assembled on aluminum shell without disassembling the radio.

### • Transmit Interrupt

Enable users to interrupt another radio call to deliver critical communication exactly when and where it's needed.

### • Integrated Bluetooth (Optional)

Built-in bluetooth for WP990 enables users to communicate with others through a bluetooth earpiece, and wireless & immediate data sharing is made possible between devices.

### • GPS Localization (Optional)

Integrated GPS enables real time tracking of mobile working team.

### • Versatile Voice Calls

Enhanced digital voice call feature facilitates call management between team members, and ensures communication privacy.

### • Secure Communication

WP990/WP995 provides basic and enhanced encryption capability, including ARC4, DES, and 256 bits AES encryption algorithm. It ensures secure communication on voice call and data transfer between team members.

### • Rich Signaling

Multiple advanced analog signalings, including MDC1200, DTMF, 2-Tone and 5-Tone, provided higher expansion capacity in current communication systems.

### • Migrate at Your Own Pace

Keeping the current communication system running during migration from analogue to digital is vital to any business, WP990/WP995 operates in both analogue and digital mode, which allows the change at your pace.

### • Vibration

Vibration alert reminds reception of message and call in noisy environment.

### • Versatile Data & Emergency Services

In addition to conventional communication service, WP990/WP995 provides rich data service and selectable functions, including Text Message, Scan, Emergency, Man Down, VOX and Lone Worker.

### • Dual-slot Pseudo Trunk

This feature can improve frequency efficiency by allocating free slot to a member and help you to communicate timely in emergency.

### • Roaming

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

### • DMR Tier3 and MPT Working Mode(Optional)

It supports DMR Tier3 and MPT1327 working mode with software licenced.

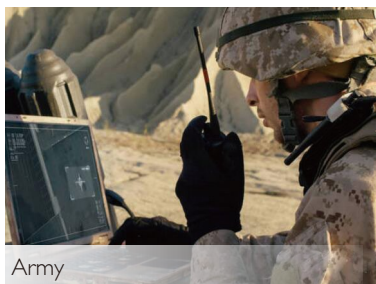
### • Improved Audio Quality

Delivering clear and loud voice communication even in noisy environments, WP990/WP995 includes advanced AI-based noise cancellation technology that decreases background noise by up to 30dB, ensuring reliable and intelligible voice calls.

### • Single Frequency Repeater Mode(Optional)

Single-frequency repeater mode under digital mode is optional, greatly saving frequency resources and extending communication range in DMO mode.

## APPLICATION SCENARIOS



Army



Public Safety



Construction

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### GPS

Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at nominal-130 dbm signal strength)

TTFF(Time To First Fix)-Cold Start	<1 minute
TTFF(Time To First Fix)-Hot Start	10 seconds
Horizontal Accuracy	5 m






### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C~+60°C
Storage Temperature	-40°C~+85°C
Thermal Shock	MIL-STD-810 C/D/E/F/G
Humidity	MIL-STD-810 C/D/E/F/G
ESD	IEC 61000-4-2
Dustproof & Waterproof	IP68

### MILITARY STANDARDS 810

810C		810D		810E		810F		810G		
APPLICABLE MIL-STD	METHODS	PROC/CAT	METHODS	PROC/CAT	METHODS	PROC/CAT	METHODS	PROC/CAT	METHODS	PROC/CAT
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.4	II
High Temperature	501.1	I,II	501.2	I/A1,II/A1	501.3	I/A1,II/A1	501.4	I/Hot,II/Hot	501.5	I/Hot I,III/Hot(A1)
Low Temperature	502.1	I	502.2	I/C3,II/C1	502.3	I/C3,II/C1	502.4	I/C3,II/C1	502.5	I/C3,II/C1
Temperature Shock	503.1	-	503.2	I/A1C3	503.3	I/C1A3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I
Rain	506.1	I,II	506.2	I,II	506.3	I,II	506.4	I,III	506.5	I,III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-	507.5	II
Salt fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Vibration	514.2	VIII/F,CURVE-W	514.3	I/10,II/3	514.4	I/10,II/3	514.5	I/24	514.6	I/24
Shock	516.2	I,II	516.3	I,IV	516.4	I,IV	516.4	I,IV	516.6	I,IV

### STANDARD ACCESSORIES

				
Adaptor	Single Unit Charger	Battery	Antenna	Belt Clip

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General	
Frequency Range	136~174MHz, 400~480MHz
Channel Capacity	1024
Zone Capacity	248
Channel Spacing	12.5KHz/20KHz/25KHz
Operating Voltage	7.5V DC±20%
Battery	2000mAh Li-ion (Standard), 2500mAh(Optional)
Dimension(with battery and without antenna)	132mmx56.5mmx38mm
Weight(with battery and antenna)	371g

Transmitter	
Frequency Stability	±0.5 ppm
Power Output	1W/4W(UHF), 1W/5W(VHF)
Modulation Limiting	±2.5KHz@12.5KHz, ±4.0KHz@20KHz, ±5.0KHz@25KHz
FM Hum and Noise	40dB@12.5KHz, 45dB@20/25KHz
Conducted/Radiated Emission	-36dBm@<1GHz, -30dBm@>1GHz
Adjacent Channel Power	60dB@12.5KHz, 70dB@20/25KHz
Audio Response	+1~-3dB
Audio Distortion	3%
4FSK Digital Modulation	12.5KHz Data:7K60F1D&7K60FXD, 12.5KHz Voice:7K60F1E&7K60FXD Combination of 12.5KHz Voice and Data:7K60F1W
FM Modulation	12.5KHz:11K0F3E, 25KHz:16K0F3E
Digital Protocol	ETSITS 102 361-1, -2, -3, -4
Digital Vocoder Type	AMBE+2™

Receiver	
Frequency Stability	±0.5ppm
Analog Sensitivity	0.22uV(12dB SINAD)
Digital Sensitivity	0.22uV/BER5%
Intermodulation	TIA603C:70dB ETSI:65dB
Adjacent Channel Selectivity	ETSI:60dB@12.5KHz, 70dB@20/25KHz
Spurious Response Rejection	TIA603C:70dB ETSI:70dB
Rated Audio Power	0.5W
Rated Audio Distortion	≤3%(typical)
Hum and Noise	40dB@12.5KHz, 45dB@20/25KHz
Audio Response	+1~-3dB
Conducted Spurious Emission	-57dBm@<1GHz, -47dBm@1GHz

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



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