# WIDEBAND

# **WR7800**

# Conventional Handheld Radio

# **Key Features:**

- 512 Channels
- Band Frequency: I36-I74 MHz VHF / 400-470 Mhz -UHF
- Voice Recorder
- Emergency Alert Button
- Lone Worker
- Short Message & Data Transmission
- Individual Call / Group Call
- VOX (Operation for Hands Free Communication)
- Li-Ion Battery 2000 mAh
- Man Down (Optional)
- GPS Location (Optional)





FC ( E V ROHS COMPLIANT

The WR7800 is a rugged handheld radio that meets the IP-54 standards for water resistance and dust protection. Compact and easy to use, it is a reliable and affordable two-way radio for small and medium sized organizations. Ideal when you need communication you can depend on but at a price you can afford, as after the handsets are purchased there are no call charges and no monthly fees. Designed with some unique features like Voice Recorder, Voice Operated Transmission (VOX), Lone Worker, Man-Down(Optional), GPS Capability, Data Transmission and a High Capacity Battery that will clearly separate it from its closest competitors.

### **Applications:**

- Hospitality
- Public Safety
- Utilities

- Transport
- Construction/Builders
- Healthcare

- National/Local Government
- Security Agencies
- Retail

- Manufacturing
- Construction/Builders
- Private Networks, etc.

# **WR7800**

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## **Key Features**

### Water Resistance & Dust Protection

The radio meets the requirements for Ingress Protection IP-54 Standard.

### Wide Band

Allows the radio to be programmed in: VHF Band - 136-174MHz and UHF Band - 400-470MHz.

### Signaling

The radio includes a variety of signaling options: 2 Tone, 5 Tone, DTMF & MDC 1200 signaling system. These signaling systems come with PTT ID, Alarm, Voice Storage, Individual Call, Group Call, Short Message and Data Transmission.

### Voice Recording

The radio is able to record up to 60 seconds of voice messages. This feature also allows for storing and reading of recorded voice messages and incoming messages when using the 2 Tone selective call option. Messages can be played back when desired by the user.

### Feature & Status Annunciation

The radio will let you know its status as well as a variety of different features by a voice announcement. Feature status announcements include: battery life remaining, GPS location, channel selected and radio ID. There is also an option to customize the language of the voice.

### Man Down (Optional)

When this feature is activated the radio will enter into an alarm mode if the radio remains in a horizontal position for a certain amount of time. The amount of time can be customized and pre-set by the user.

### Software Upgradable

Allows the user to add or delete functions to keep the radio up to date with current and future software upgrades.

Allows hands free operation of the radio when the appropriate VOX accessory is

### **Powerful Audio Output**

A 750mW rated audio output ensures a clear audio even in the noisiest of environments.

Simplifies maintenance of the radio and tuning of the radio by allowing both calibration and programming using PC software.

### **Embedded Message & Serial Number**

The radio can store both messages and records, e.g. maintenance, history or programming records, The electronic serial number (ESN) makes the unit identifiable even the radio's tag with the serial number & other information is lost or removed.

### Password Protection

A radio password can be designated upon PC programming. This protects the radio from unauthorized change in program or accessing information related to the radio.

### **Accessories:**



**Antenna** 















Accessories: (optional)

**Specifications** 

### General

**Power Supply Operating Frequencies Number of Channels Channel Spacing** PLL Step Type of Emissions Current Drain (Approx)

Antenna Impedance **Operating Temperature** Dimensions: H x W x D (mm) Weight (gm) Average Battery Life @ 5/5/90 cycle

### Transmitter

Frequency Stability

**Power Output Modulation Limiting** FM Hum & Noise Conducted/Radiated Emission Adjacent Channel Power Audio Response (300-3000Hz) **Audio Distortion** Ext. Microphone Connector

Sensitivity (12dB SINAD) EIA

Sensitivity (20dB SINAD) ETS Intermodulation EIA Adjacent Channel Selectivity Spurious Rejection Rated Audio Audio Distortion @ Rated Audio Audio Response (300 - 3000Hz) **Conducted Spurious Emissions** 

7.5VDC ±20% 136-174MHz, 400-470MHz 512 Channels 12.5/20/25kHz 2.5/5/6.25kHz 16K0F3E/11K0F3E Tx High<1.5A Rx Max. audio,330mA (Internal Speaker) Standby <70mA 50O -22°C to +60°C

113.5 x 54 x 33 with Li-ion Battery

270g (estimate)

16 hours (2000mAh)

2.5ppm (-22°C to +60°C, 25°C Reference) 1W(L), 2W(M), 4 or 5W(H) ±2.5kHz@12.5kHz, ±4kHz@20kHz, ±5kHz@25kHz -45dB/-40dB typical (Wide/Narrow) -36dBm<1GHz, -30dBm>1GHz -60dB@12.5kHz, -70dB@20/25kHz +1 to -3dB <3%

Compatible with EP450

0.28µV@12.5kHz 0.25µV@20/25kHz typical 0.50µV typical 70dB 60dB@12,5kHz, 70dB@20/25kHz 70dB 1000mW 3% -1 to -3dB -57dBm<1GHz -47dBm>1GHz ETS300 086

### Applicable U.S. Military Specifications & IP Rating

Standard	MIL 810F	
	Method	Procedure
Low Pressure	500.4	1, 11
High Temperature	501.4	1, 11
Low Temperature	502.4	1, 11
Temperature Shock	503.4	I
Solar Radiation	505.4	I
Rain Blowing/Drip	506.4	I, III
Humidity	507.4	-
Salt Fog	509.4	-
Dust Blowing	510.4	I
Vibration	514.5	I
Shock	516.5	I, IV
Also meets equivalent MIL-STD-819-C,	D and E	
Ingress Protection Standard		
Dust and Water	IP54 (Dust-protection and water resistant)	