



**EXCERA**

Innovate to Succeed

## DMR Portable Radio EP8000

- ◆ Full Duplex Communications
- ◆ Superior Digital Voice with High-Power Loudspeaker
- ◆ IP68 and MIL-STD-810 Standard Compliance
- ◆ DMR Tier II Conventional and DMR Tier III Trunking
- ◆ Glonass Support



# Advantage Features

## Superior Digital Voice

Built 2W high-power loudspeaker, ensuring the clear and crisp voice communications. With the adoption of narrowband codec and digital error-correction technologies, EP8000 is capable of ensuring your superior voice in the noise environment or at the edge of the coverage area.



## High Capacity Battery Design

Equipped with 2400mAh or 3400mAh high capacity Panasonic Li-ion battery to ensure the radio's usage life.



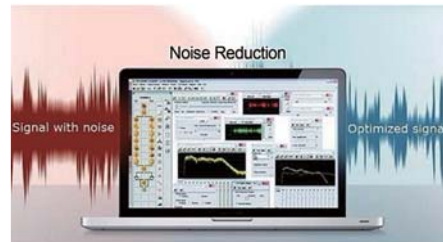
## Built-in Bluetooth(Optional)

Equipped Bluetooth inside radio, ensuring the expanding applications such as BT accessories, BT wirelss programming and other applications.



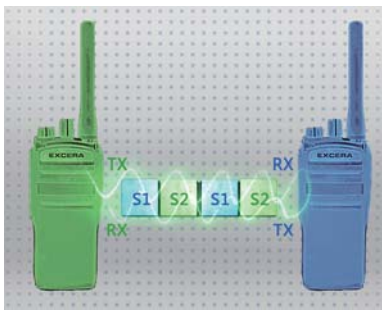
## Built-in Noise Reduction Function (Optional)

Featured with advanced noise reduction which makes the noise suppression be up to 25 dB.



## Full-duplex calling (Optional)

Full duplex calling allows for natural and intuitive communications without to push-to-talk.



## Built-in GPS (Optional)

Supports to track position information and the GPS data.



## DMR Tier III Support

Supports DMR Tier III just by software upgrade and makes the radio applications more rich and more advanced.



## Rich API Support

Rich API supports the user or third party to develop supplemental applications.



# Advantage Features

## IP68 and MIL-STD-810 Standards Compliance

EP8000 is compliant with the MIL-STD-810-G and IP68 (IEC60529) standard, ensuring outstanding performance even in harsh environment.



# Main Functions

## DMR Conventional

### Radio Function

- › Direct/Repeat Mode
- › Scan
- › Bluetooth 4.0
- › RMO Pseudo Trunk
- › TDMA Direct Mode
- › Multi-site Roaming
- › Easy Trunk
- › VOX

### Voice Service

- › Group Call
- › Private Call
- › All Call
- › Emergency Call
- › Broadcast Call
- › Phone call
- › One Touch Call

### Data Service

- › Text Messaging
- › Status Messaging
- › Clone

### Supplementary Service

- › Call Alert
- › Radio Check
- › Remote Monitor
- › Radio Enable/Disable /Kill

### Location Service (optional)

- › GPS
- › Beidou
- › GLONASS

### Safety Function

- › DMRA Encryption(ARC4, DES&AES)
- › Transmit Interrupt
- › Lone Worker
- › Man Down

## Analog Conventional Signaling

- › CTCSS&CDCSS
- › 2-Tone
- › 5-Tone
- › MDC1200

## DMR Tier III and MPT Trunking (Software Licensed)

# Optional Accessories

Remote Speaker Microphone <b>EMRN011</b>	Remote Speaker Microphone (IP67) <b>EMRN041</b>	Remote Speaker Microphone (IP67 & Dual PTT) <b>EMRN051</b>	C Style Earpiece <b>EEHN011</b>	1-Wire Earpiece with Transparent Acoustic Tube <b>EEAN011</b>	2-Wire Earpiece with Transparent Acoustic Tube <b>EEAN021</b>	Programming Cable <b>EPC01</b>
Bluetooth Headset <b>EEWB03E</b>	Wireless PTT <b>EPTTB01</b>	3400 mAh Battery <b>EB342L</b>	Multi-unit Charger <b>EMC702L</b>	Vehicle Power Adapter <b>EP102V1</b>	Leather Case <b>ELBY01</b>	

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# Specifications

## General

Frequency Bands	VHF: 136-174MHz UHF1: 400-470MHz UHF2: 450-520MHz UHF3: 350-400MHz UHF4: 300-360MHz UHF5: 806-825MHz 851-870MHz 896-902MHz 935-941MHz
Channel Capacity	1024
Channel Space	12.5/20/25KHz
Dimensions(H*W*D)	125*54*35mm
Weight	320g (With standard battery and antenna)
Operating Voltage	DC 7.2V
Battery	2400mAh(Li-ion, Panasonic cell)
Battery Life (5-5-90 Duty Cycle, High TX Power)	Analog: 13H(No GPS) 11.5H(With GPS) Digital: 15H(No GPS) 13H(With GPS)

## Transmitter

Frequency Stability	0.5ppm
RF Power Output	VHF: 5W/1W UHF1/UHF2/UHF3/UHF4: 4W/1W UHF5: 2.5W/1W
Digital Modulation	7K60FXD (Data Only) 7K60FXW (Data and Voice)
Analog Modulation	16K C F3E @ 25KHz /14K C F3E @ 20KHz /11K C F3E @ 12.5KHz
4FSK Modulation Accuracy	5%
4FSK TX BER	0%
4FSK and Magnitude Error	5% / 1%
Adjacent Channel Power	70dB @ 25/20 KHz / 60dB @ 12.5 KHz
Conducted and Radiated Emission	-36dBm <1GHz / -30dBm >1GHz
Transmission Deviation limits	5KHz@25KHz / 4KHz@20KHz /2.5KHz@12.5KHz
Audio Distortion	3%
Hum and Noise	48dB @ 25KHz / 46dB@20KHz / 43dB @ 12.5KHz
Audio Response	+1 ~ -3dB

## Receiver

Digital Sensitivity	-120dBm / BER 5% -116dBm / BER 1%
Digital Dynamic Faded Sensitivity (100KM/H& 8KM/H Rayleigh Fading)	-104dBm
Analog Sensitivity	-120dBm / 12dB SINAD
Intermodulation	70dB (TIA603) 65dB (ETSI)
Blocking	90dB (TIA603 & ETSI)
Spurious Response Rejection	75dB (TIA603 & ETSI)
Adjacent Channel Selectivity	75dB@25 KHz (TIA603) 70dB@25 KHz (ETSI) 70dB@20KHz (TIA603 & ETSI) 65dB@12.5KHz (TIA603) 60dB@12.5 KHz (ETSI)
Conducted Spurious Emission	-57dBm
Rated Audio Power Output	1W
Rated Audio Distortion	3%
Hum and Noise	48dB @25KHz / 46dB@20KHz / 43dB@12.5KHz
Audio Response	+1 ~ -3dB
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361 -1, -2,-3,-4

## Reliability

Operating Temperature	-30 ~ +60 C
Storage Temperature	-40 ~ +85 C
Dust & Water Intrusion	IP68 (IEC60529)
Humidity	MIL-STD-810 C/D/E/F/G Standard
Shock&Vibration	MIL-STD-810 C/D/E/F/G Standard
ESD	IEC 61000-4-2(level 4) ±8KV( Contact ) , ±15KV( Air)

## GPS

TIFF Cold Start	< 60s
TIFF Hot Start	< 10s
Horizontal Positioning Accuracy	< 9m

## Standard Accessories :



Pictures above are for reference only and may vary from actual products.



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