

## Specifications

### General

Frequency Bands	VHF: 136-174MHz UHF2: 450-520MHz UHF1: 400-470MHz UHF3: 350-400MHz UHF4: 300-360MHz
Channel Capacity	1024
Channel Space	12.5/20/25KHz
Dimensions(H*W*D)	125*54*35mm
Weight	320g (With standard battery and antenna)
LCD	2.0 inch transfective TFT LCD 240×320 pixels, 262K colors
Operating Voltage	DC 7.4V
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:High 5W Low:1W UHF:High 4W Low:1W
Digital Modulation	7K60FXD (Data Only) 7K60FXW (Data and Voice)
Analog Modulation	16K ∅ F3E @ 25KHz /14K ∅ F3E @ 20KHz /11K ∅ 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

### Standard Accessories:



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



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### 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	IP67 (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&GLONASS

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



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Innovate to Succeed

## DMR Portable Radio EP8100

- ◆ Full Duplex Communications
- ◆ 2.0" HD Transflective TFT LCD Display
- ◆ IP67 and MIL-STD-810 Standard Compliance
- ◆ DMR Tier II Conventional and DMR Tier III Trunking



# Advantage Features

## 2.0" HD Transflective TFT LCD Display

Adopts 2.0" HD transflective TFT LCD display, allowing good visibility even under outdoor strong sunlight.



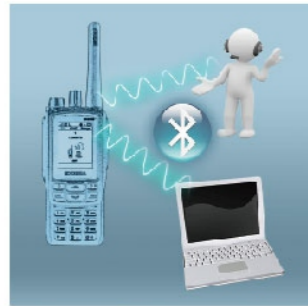
## High Capacity Battery Design

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



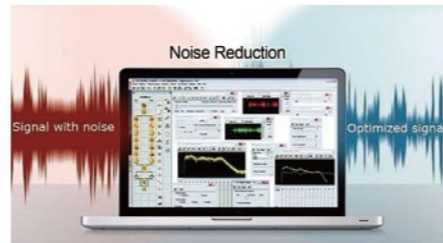
## Built-in Bluetooth(Optional)

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



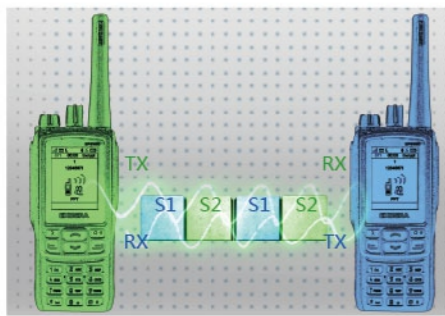
## Built-in Noise Reduction Function (Optional)

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

## IP67 and MIL-STD-810 Standards Compliance

EP8100 is compliant with the MIL-STD-810-G and IP67 (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
- › Vibration
- › VOX
- › Time&Date Display

### 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

### Safety Function

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

### Location Service (optional)

- › GPS
- › Beidou
- › GLONASS

## Analog Conventional Signaling

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

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

# Optional Accessories

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

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