

# Specifications

## General

Frequency Bands	VHF1:136-174 UHF1:400-470MHz UHF3:350-400MHz
Channel Capacity	1024
Channel Space	12.5KHz/25KHz
Dimensions(H*W*D)	125*54*35mm
Weight	320g (With standard battery and antenna)
LCD	2.0 inch transreflective TFT LCD 240*320 pixels, 262K colors
Operating Voltage	DC 7.4V
Battery	2400mAh
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	High:4W Low:1W
Digital Modulation	7K60FXD (Data Only) 7K60FXW (Data and Voice)
Analog Modulation	16K C F3E @ 25KHz / 11K C F3E @ 12.5KHz
4FSK Modulation Accuracy	5%
4FSK TX BER	0%
4FSK and Magnitude Error	5% / 1%
Adjacent Channel Power	70dB @ 25 KHz / 60dB @ 12.5 KHz
Conducted and Radiated Emission	-36dBm <1GHz / -30dBm >1GHz
Transmission Deviation limits	5KHz@25KHz / 2.5KHz@12.5KHz
Audio Distortion	3%
Hum and Noise	45dB @ 25KHz 40dB @ 12.5KHz
Audio Response	+1dB ~ -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
Intermediation	70dB (TIA603) 65dB (ETSI)
Blocking	90dB (TIA603 & ETSI)
Spurious Response Rejection	75dB (TIA603 & ETSI)
Adjacent Channel Selectivity	75dB@25 KHz(TIA603&ETSI) 65dB@12.5KHz(TIA603&ETSI)
Conducted Spurious Emission	-57dBm
Rated Audio Power Output	1W
Rated Audio Distortion	3%
Hum and Noise	45dB @25KHz / 40dB@12.5KHz
Audio Response	+1dB ~ -3dB
Digital Vocoder Type	AMBE++ / NVOC
Digital Protocol	ETSI-TS102 361 -1, -2, -3, -4

## Reliability

Operating Temperature	-30 ~ +60 C
Storage Temperature	-40 ~ +85 C
IP Rating / Humidity	IP67 (IEC60529)
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	10meters

## Standard Accessories :



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

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## DMR Portable Radio EP8100

- ◆ Full Duplex Communications
- ◆ 2.0" HD Transreflective TFT LCD Display
- ◆ IP67 and MIL-STD-810 Standards Compliance
- ◆ DMR Tier II Conventional and DMR Tier III Trunked





# Advantage Features

## 2.0" HD Transflective TFT LCD Display

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



## High Capacity Battery Design

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



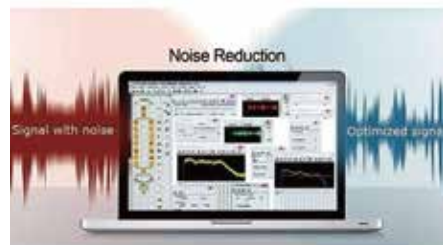
## Built-in Bluetooth(Optional)

Equipped Bluetooth inside supports the further features such as BT accessories, BT wireless programming and other applications.



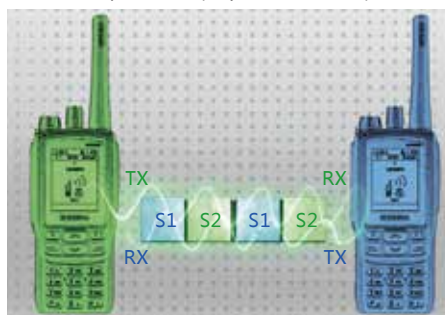
## Built-in Noise Reduction Function(Optional)

Featured with advanced noise reduction, supports extra 25 dB noise cancellation performance.



## Full-duplex calling(Optional)

Full duplex calls allow for natural and intuitive communications without to push-to-talk(only in trunked mode).



## Built-in GPS(Optional)

Supports viewing of GPS position information and sending of GPS text message.



## DMR Tier III Support

Supports DMR Tier III, just by software upgrade and make the radio application 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) high reliability standards, ensuring outstanding performance even in harsh environment.



# Main Functions

### DMR Conventional

#### Radio Function

- > Contact List
- > Caller ID
- > Busy Channel
- > Transmit Interrupt
- > TDMA Direct Mode
- > Lone Worker
- > Man Down
- > Vibration

#### Voice Service

- > Group Call
- > Private Call
- > All Call
- > Emergency Call
- > Broadcast Call

#### Data Service

- > Text Messaging
- > Status Messaging

#### Scan Function

- > Scanning
- > Priority Scanning
- > Scan List Edit

#### Supplementary Service

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

#### Safety Function

- > End to End Encryption

#### Location Service (optional)

- > GPS
- > Beidou
- > GLONASS

### Analog Conventional

- > CTCSS&CDCSS
- > 5-tone
- > MDC1200
- > DTMF

### DMR Trunking (Software Licensed)

# Optional Accessories

3400mAh Battery EB342L	Remote Speaker Microphone EMR011	C type earphone EEH011	One wire transparent tube earphone EEA011	2-wires transparent tube earphone EEA021	Police Bone Conduction Headset EEB011	Fireman Bone Conduction Headset EEB021
Bluetooth Earphone EEW021	Smart Bluetooth Earphone EEW011	Bluetooth PTT EPTT01	Hang Rope ESN01	USB Programming Cable EPC01		

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