



EXCERA
Innovate to Succeed

DMR Portable Radio EP8100

- ◆ Full Duplex Communications
- ◆ 2.0" HD Transflective TFT LCD Display
- ◆ IP68 and MIL-STD-810 Standard Compliance
- ◆ DMR Tier II Conventional and DMR Tier III Trunking
- ◆ Glonass Support



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.



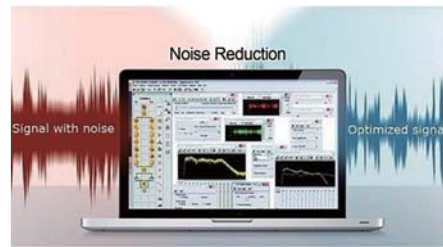
Built-in Bluetooth(Optional)

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



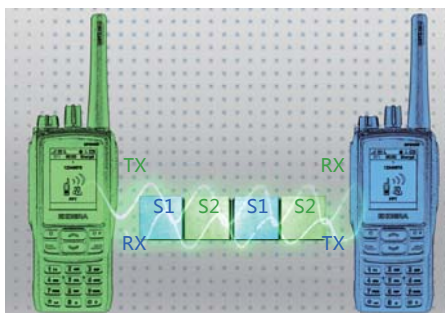
Built-in Noise Reduction Function (Optional)

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

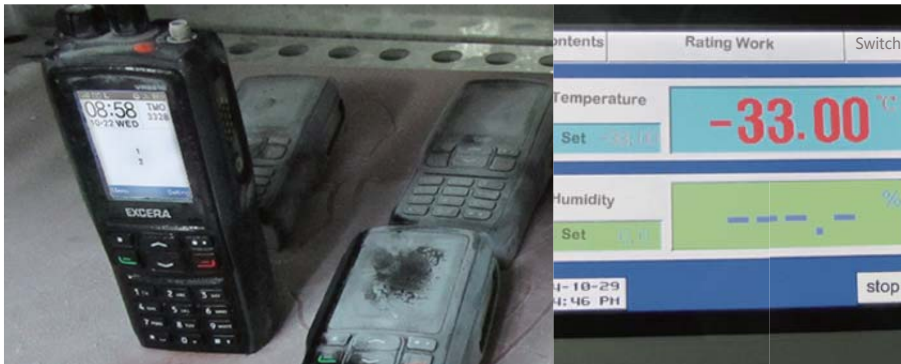
Rich API supports the user or third party to develop supplemental applications.



Advantage Features

IP68 and MIL-STD-810 Standards Compliance

EP8100 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
- › 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

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 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 | |

Excera retains right to change the products design and specification without prior notice. Parts supply for the market is different, please contact the local dealer. Promotional photos are for reference only. All products as per the material subjects.

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) |
| LCD | 2.0 inch transfective TFT LCD 240x320 pixels, 262K colors |
| 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 @ 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 |

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:



Battery

Charger

Power Adapter

Antenna

Belt Clip

Hang Rope

User Manual

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



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