



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.



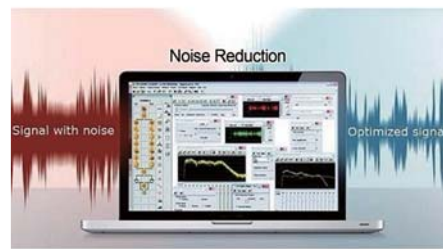
Built-in Bluetooth(Optional)

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



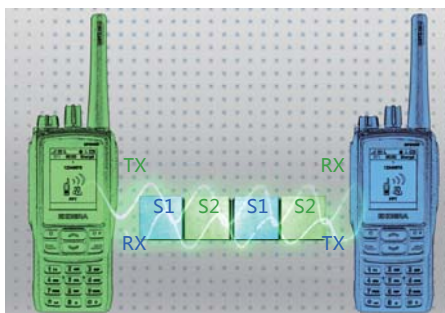
Built-in Noise Reduction Function (Optional)

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

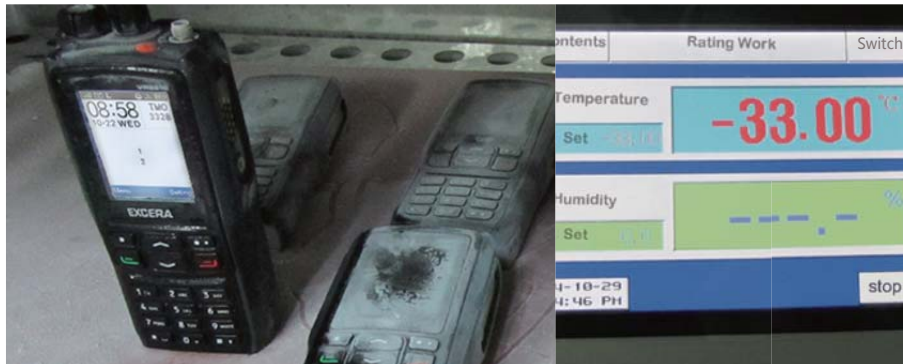
Rich API supports the user or third party to develop supplemental applications.



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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