Specifications

General

Frequency	VHF1:136-174 MHz UHF1:400-470MHz UHF3:350-400MHz
Channel Capacity	1024
Channel Space	12.5KHz/25KHz
Dimensions(H*W*D)	60*174*190mm
Weight	1500g
LCD	2.8" HD TFT LCD 240×320 pixels, 262K colors
Operating Voltage	DC13.6V±15%
Current Drain	<9A (45W) <7A (25W) <5A (5W)

Transmitter

Frequency Stability	0.5ppm
RF Power Output	High Power Model: 45~50W Low Power Model: 25W
Digital Modulation	7K60FXD(Data Only) /7K60FXW(Data and Voice)
FM Modulation	16KℂF3E@25KHz / 11KℂF3E@12.5KHz
4FSK Modulation Accuracy	5%
4FSK BER	0%
4FSK and Magnitude Error	5%/1%
Adjacent Channel Power	70dB@25KHz / 60dB@12.5KHz
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

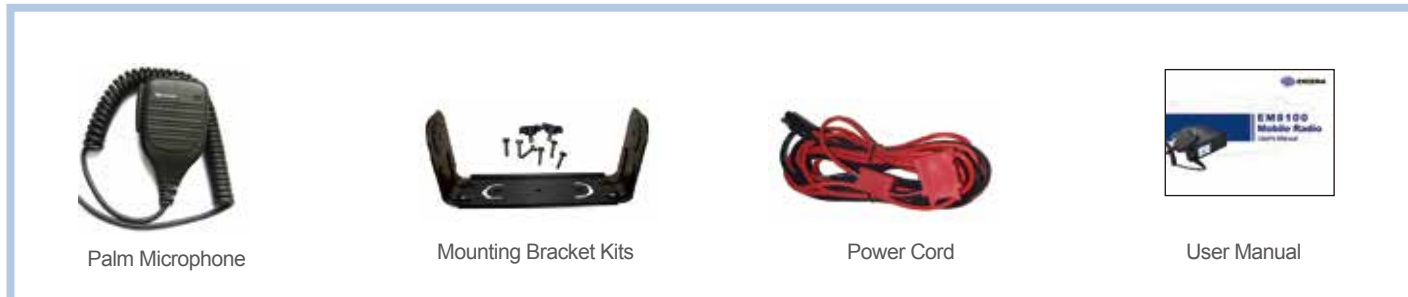|	
Digital Sensitivity	-120dBm / BER 5% -116dBm / BER 1%
Digital Dynamic Faded Sensitivity (100KM/H& 8KM/H Rayleigh Fading)	-104dBm
Analog Sensitivity	-120dBm / 12dB SINAD
Intermodulation	75dB (TIA603) / 70dB(ETSI)
Blocking	95dB (TIA603 & ETSI)
Spurious Response Rejection	75dB (TIA603 & ETSI)
Selectivity	75dB@25 KHz(TIA603&ETSI) /65dB@12.5KHz(TIA603&ETSI)
Conducted Spurious Emission	-57dBm
Rated Audio Power Output	4W(Internal@20ohm load) /7.5W(External@8ohm load)
Rated Audio Distortion	3%
Hum and Noise	45dB @25KHz / 40dB@12.5KHz
Audio Response	+1dB ~ -3dB
Digital Vocoder Type	AMBE++ / NVOC
Digital Protocal	ETSI-TS102 361 -1, -2,-3,-4

Reliability

Operating Temperature	-30 ~ +60℃
Storage Temperature	-40 ~ +85℃
IP Rating/Humidity	IP54(The Control Panel IP67 Design)
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 Accuracy	10meters

Standard Accessories：

Palm Microphone

Mounting Bracket Kits

Power Cord

User Manual

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

SHENZHEN EXCERA TECHNOLOGY CO.,LTD.

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DMR DIGITAL MOBILE RADIO ASSOCIATION

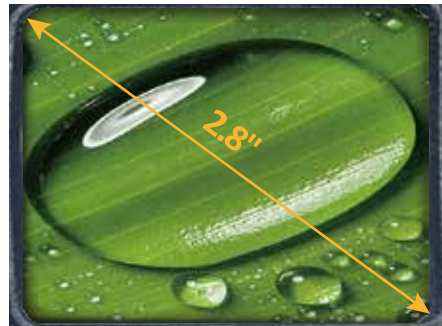**EXCERA**

DMR Mobile Radio EM8100

◆ **Full Duplex Communications**

◆ **2.8" HD TFT LCD Display**

◆ **IP54 and MIL-STD-810 Standards Compliance**

◆ **DMR Tier II Conventional and DMR Tier III Trunked**

2.8" HD TFF LCD Display
Adopts 2.8" HD TFT LCD display for a good visibility.

Innovative Auto-protecting Technology
This feature ensures the radio work normally, when the loader is not matching (abnormal SWR and unmatched current, etc).

Built-in Bluetooth(Optional)
Equipped Bluetooth inside supports the further features such as BT accessories, BT wirelss programming and other applications.
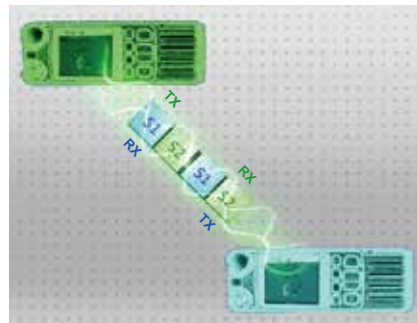
Built-in Noise Reduction Function(Optional)
Featured with advanced noise reduction, supports extra 25 dB noise cancellation performance.

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.

IP54 and MIL-STD-810 Standards Compliance
EM8100 is in accordance with the MIL-STD-810 and IP54(IEC60529) high reliability standards, ensuring outstanding performance even in harsh environment.(The control panel meets the IP67 standards)

Remote Mount Control Head
The remote mount control head can be mounted on the dashboard without the radio chassis while the space is limited in motocycle and vehicle.

Main Functions

DMR Conventional

Radio Function	Voice Service	Data Service	Supplementary Service	Location Service (optional)
› Contact List	› Group Call	› Text Messaging	› Call Alert	› GPS
› Caller ID	› Private Call	› Status Messaging	› Radio Check	› Beidou
› Busy Channel	› All Call		› Remote Monitor	› GLONASS
› Transmit Interrupt	› Emergency Call	Scan Function	› Radio Enable/Disable /Kill	
›TDMA Direct Mode	› Broadcast Call	› Scanning		
› Lone Worker		› Priority Scanning	Safety Function	
› Public Address		› Scan List Edit	› End to End Encryption	
› Ignition				

Analog Conventional

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

DMR Trunking (Software Licensed)

Optional Accessories

Keypad Microphone **EMKA01**	Power Supply **EEPS01**	Antenna **EAM353701**	GPS Antenna **EAM157501**	Vehicle Remote Control Head **ERC01**	Motocycle Remote Control Head **ERC02**	Bluetooth Earphone **EEWB021**
Smart Bluetooth Earphone **EEWB011**	Bluetooth PTT **EPTTB01**	USB Programming Cable **EPC02**				