



# EXCERA

Innovate to Succeed

## DMR PORTABLE RADIO EP5100

- ◆ 100% Compliant with CE and FCC Certification for Each Radio
- ◆ Analog and Digital Dual Modes
- ◆ Supports GPS and Bluetooth
- ◆ Supports DMR Multi-site IP connection
- ◆ DMRA Encryption
- ◆ Supports DMR Tier III Trunking Mode
- ◆ Ultra High Cost Effective





### General

Frequency Bands	VHF:136-174MHz UHF:400-470MHz
Channel Capacity	1024
Channel Space	12.5KHz/20KHz/25KHz
Dimensions(H*W*D)	115*54*30mm
Weight	270g
LCD	1.8 inch TFT LCD 128×160pixels, 262K colors
Operating Voltage	7.4V
Battery	2400mAh Panasonic Cell 2100mAh Normal Cell

### Transmitter

Frequency Stability	0.5ppm
RF Power Output	VHF:High 5W Low:1W UHF:High 1W Low:1W
Digital Modulation	7K60FXD (Data Only) 7K60FXW (Data and Voice)
Analog Modulation	16K $\varnothing$ F3E @ 25KHz 11K $\varnothing$ F3E @ 12.5KHz
4FSK Modulation Accuracy	5%
4FSK TX BER	0%
4FSK and Magnitude Error	5% / 1%
Adjacent Channel Power	70dB@20/25KHz / 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	45dB @ 25KHz /43 dB @ 20KHz 40dB @ 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
Intermediation	65dB (TIA603) 65dB (ETSI)
Blocking	90dB (TIA603 & ETSI)
Spurious Response Rejection	70dB (TIA603 & ETSI)
Adjacent Channel Selectivity	70dB@25 &20KHz(ETSI) 60dB@12.5KHz(ETSI)
Conducted Spurious Emission	-57dBm
Rated Audio Power Output	0.75W
Rated Audio Distortion	3%
Hum and Noise	45dB @25KHz/43dB@20KHz 40dB@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
IP Rating/Humidity	IP55 (IEC60529)
Shock&Vibration	Per 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

### Standard Accessories



Battery



Charger



Power Adapter



Antenna



Belt Clip



Hang Rope



User Manual