

EM8100B Digital Base Station

- ◆ Can be used as a single frequency repeater
- ◆ 50W high power capability
- ◆ Built-in AC power supply and support DC power supply
- ◆ Automatically switch to backup battery when AC power off
- ◆ Built-in float charge unit design for external backup lead-acid battery
- ◆ Desktop cabinet design for easy installation and use
- ◆ Fan free design without fan noise



Specifications

General

Frequency Range	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 Spacing	12.5KHz/20KHz/25KHz
LCD	2.8 inch HD LCD 240x320 pixels, 262K colors
Dimensions	221*339*133mm
Weight	4.8KG

Power Input & Output

Rated Input Voltage	AC 100-240V/DC 11.8-15.6V
Input Current	<4.5A
Charge Voltage Output	13.6-13.8 VDC (to charge 12V lead-acid backup battery)
Charge Current Output	DC 1.5A

Transmitter

Frequency Stability	0.5ppm
RF Max. Power Output	VHF: 50W/25W UHF1/UHF2/UHF3/UHF4: 45W/25W UHF5: 35W(800MHz) 30W(900MHz)
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 @ 25KHz / 60dB @ 12.5 KHz
Conducted and Radiated Emission	-36dBm <1GHz / -30dBm >1GHz
Transmission Deviation Limit	5KHz@25KHz 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	75dB (TIA603) / 70dB(ETSI)
Blocking	95dB (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
Max Audio Power Output	7W
Rated Audio Distortion	3%
Hum and Noise	45dB @25KHz 40dB @12.5KHz
Audio Response	+1dB ~ -3dB
Digital Vocoder Type	AMBE++/NVOC

Reliability

Operating Temperature	-30°C to +60°C
Storage Temperature	-40°C to +85°C
Shock & Vibration	Per MIL-STD-810 C/D/E/F/G Standard
ESD	GB/T 17618-4.2 IEC 61000-4-2 (level 4) ±8KV (contact) ±15KV (air)
Lightning Surge	EN 61000-4-5 6KV (differential) 6KV (common)

Standard Accessories



Palm Microphone



AC Power Cord



User Manual



SHENZHEN EXCERA TECHNOLOGY CO., LTD.

www.excera.com.cn