

## **ER-9000 Series**

## **Digital/Analog Repeater**

ER-9000 VHF - 50W VHF (136-174 MHz) ER-9000 U1 - 45W UHF (400-470 MHz)

The ER-9000 Series DMR Repeater provides high-performance, unmatched durability, and a lightweight, space efficient ergonomic design that will meet all your communication needs. Competitively priced and fully compatible with other Tier 2 DMR radios, its auto-sensing Mixed Mode will work easily with both Digital and Analog radios in your fleet.







- 50W VHF / 45W UHF Power Output
  - DMR Tier II TDMA Technology
- Digital, Analog, Mixed Mode (Auto-Sensing)
- Multi-Site IP Connectivity (64 ER-9000 Repeaters)
- Remote Programming via RJ45 Connector to Internet
  - 100% Continuous Duty Cycle
    - Community Repeater
    - Integrated Power Supply
  - 19" Wide, U1 Rack or Shelf Mount
  - Multiple Accessory Connectors (DB26, DB15, DB9)



## ER-9000 Series Digital/Analog Repeater



SPECIF	ICATIONS		
GENERAL			
ER-9000 U1	400-470 MHz		
ER-9000 VHF	136-174 MHz		
Channel Capacity	128		
Digital	DMR Tier II TDMA		
Channel Spacing	12.5kHz/20kHz/25kHz		
Operating Voltage	DC 13.6V±15% / AC 100-240VA		
Frequency Stability	0.5ppm		
Dimensions (H/W/D)	1.74 x 19 x 14.8" (44x483x375mm)		
Weight	16.75 lbs.		
LCD	1.8 inch TFT LCD/128x160 pixels, 262Kcolo		
Current Drain (Standby)	< 1A		
Current Drain (Transmit)	< 6A@25W <10A@50W		
TRANSMITTER			
RF Max. Power Output	VHF 50 Watt, UHF 45 Watt		
FM Modulation	16K¢F3E@25KHz/14K¢F3E@20KHz/ 11K¢F3E@12.5KHz		
Digital Modulation	Data Only: 7K60FXD Data & Voice: 7K60FXW		
4FSK Modulation Accuracy	5%		
4FSK BER	0%		
4FSK and Magnitude Error	5%/1%		
Conducted/Radiated Emission	-36dBm<1GHz/-30dBm>1GHz		
Transmission Deviation Limits	5KHz@25KHz/4KHz@20KHz/ 2.5KHz@12.5KHz		
Adjacent Channel Power	70dB@25/20KHz / 60dB@12.5KHz		
Audio Distortion	3%		
Hum and Noise	48dB@25KHz/46dB@20KHz/43dB@12.5KH		
Audio Response	+1~-3dB		
TX Antenna/Duplexer Connection	N Female		
RE	CEIVER		
Sensitivity (Analog)	-120dBm/12dB SINAD		
Sensitivity (Digital)	-120dBm/BER 5%, -116dBm/BER 1%		
Digital Dynamic Faded Sensitivity	-104dBm		
Intermodulation	75dB (TIA603) / 70dB (ETSI)		
Blocking	95dB (TIA603 & ETSI)		
Spurious Response Rejection	75dB (TIA603 & ETSI)		
Adjacent Channel Selectivity	75dB@25KHz (TIA603), 70dB@25KHz (ETSI), 70dB@20KHz (TIA603 & ETSI), 65dB@12.5KHz (TIA603), 60dB@12.5KHz (ETSI)		
Conducted Spurious Emission	-57dBm		
Rated Audio Power Output	1W (16Ω Load)		
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		
RX Antenna Connection	BNC Female		

ENVIRONMENTAL		
Operating Temperature	-22° to 140° F (-30° C to +60° C)	
Storage Temperature	-40° to 185° F (-40° C to +85° C)	
ESD	IEC 61000-4-2 (Level 4) ±8KV(Contact) / ±15KV(Air)	
Shock & Vibration	MIL-STD-810 C/D/E/F/G Standard	
Surge Immunity Test (EN 6100~4~5)	Differential Mode: 6KV Common Mode: 6KV	
Shock/Vibration	MIL-STD-810F/G	

Approvals	FCC	Industry Canada
ER-9000 U1	2AE6CER9000U1	20125-ER9000U1
ER-9000 VHF	2AE6CER9000VHF	20125-ER9000VHF

NOTE: Some features indicated by specifications listed are prohibited by FCC rule and are not available on models sold in the U.S. or its territories.









Manufactured to ISO-9001:2000 quality standard.

## CAVCOM CavComInc.com



Contact Us Online Or Let's Talk! 866-547-4988



cavcominc.com

866-547-4988

1872 Industries Lane, Walker, MN 56484

Repeater and AC Power Cord

Specifications are subject to change without notice.