

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)



Back View

SPECIFICATIONS

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, 262Kcolors
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 ϕ F3E@25KHz / 14K ϕ F3E@20KHz / 11K ϕ 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@12.5KHz
Audio Response	+1~-3dB
TX Antenna/Duplexer Connection	N Female

RECEIVER

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 (16 Ω 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

PACKAGE INCLUDES:

Repeater and AC Power Cord

Specifications are subject to change without notice.

ACCESSORIES



ACCESSORY OPTIONS

Duplexer (P/N: TA-DUPU/TA-DUPV)

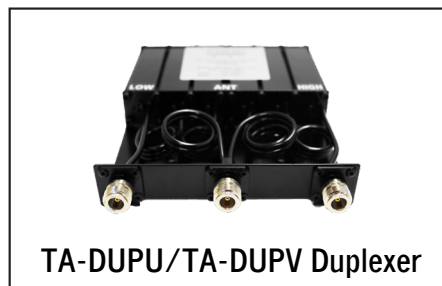
Duplexer Cable Kit (P/N: ER-9000 DK)

**Kit is one 18" N Male to N Male cable & one 18" BNC Male to N Male cable

Programming Software

Programming Cable (RJ45/Ethernet)

DC Power Cable (P/N: ER-9000 DC)



TA-DUPU/TA-DUPV Duplexer

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.

maxon®

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