

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)

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 | 16KϕF3E@25KHz/14KϕF3E@20KHz/ 11KϕF3E@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 (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 |

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)

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.

11535 W. 83rd Terrace Lenexa, KS 66214

Tel: (800) 456-2071 - Tel: (913) 859-9515

Fax: (913) 859-9550

Web: www.maxonamerica.com

E-mail: maxon@maxonamerica.com