KENWOOD

VP8000

Multi-Band · Multi-Protocol
Mission Critical Portable Radio

The KENWOOD Viking 8000 series Multi-Band, Multi-Protocol portable is specifically designed for today's public safety agencies with advanced features and ergonomics to meet the first responder's mission critical operational needs.

Features

- Multi-Band operation (VHF, UHF, 700/800 MHz)
- Multi-Protocol
  - P25 Phase 1 & 2 Trunking
  - P25 Conventional
  - DMR Tier II & Tier III[1]
  - Viking16 (SmartNet/SmartZone™ Compatible)
  - FM Analog
- Mixed protocol zones (each channel in a zone can be from a different system)
- 1024 channels (2048 & 4096 options)
- Public safety ergonomics: flare grip for control, large glove friendly knobs, large emergency button
- 3-Watt audio maximum output for high noise environments
- Voice annunciation & custom announcement creation
- Fully ruggedized - IP67/68 & MIL-STD-810 C/D/E/F/G/H
- Full key models (with numeric keypad)
- Built-in GPS receiver/antenna for enhanced awareness
- MDC-1200 & GE-Star signaling
- P25 Authentication
- Bluetooth® / Bluetooth Low Energy
- Wi-Fi® 2.4 & 5 GHz (802.11a/b/g/n/ac)
- Man Down
- Instant Recording Replay (IRR) and Voice Recording
- Text Messaging
- Radio Cloning
- FIRESafe® Fire Ground Commander and First Responder
- Encryption
  - ARC4™ software encryption; compatible with Motorola ADP™
  - P25/TIA defined: AES-256
  - DES-OFB
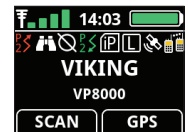 - Over-the-Air-Rekeying (OTAR)

User Selectable Color Themes

- Large full-color top LCD
- Multi-line text on both front and top displays
- Top flip display changes text orientation for viewing while in holster
- Multiple visual indicators including battery health & signal strength
- Day & night user selectable display options (8 themes available)

Day - High Contrast

Night - High Contrast

Accessories

Complete line of accessories including microphones, speakers & antennas. Download the accessory catalog here:
https://info.efjohnson.com/viking-accessory-catalog/

We combine P25 design expertise with recognized quality & reliability along with advanced technology to make KENWOOD Viking radios simple to use & maintain.

Perpetual Software Licensing

Adds greater value to your radios by extending the life of the software into your next hardware platform — you own the software option forever, and your licenses are simple to manage with our cloud-based tool — Vault™.

Armada® Fleet Management

Update radios in a group rather than one at a time. One template programs both portables & mobiles. Supports either direct computer connection or Over-the-Air Programming (OTAP). Elite battery management enables wireless tracking of battery fleet.

TrueVoice™ Noise Cancellation

Software-based noise cancellation automatically filters out noise source frequencies and eliminates the need for extra configuration. Works in analog or digital mode and with any accessory.

VP8000 Portable Specifications

General		VHF	UHF	700/800 MHz
Frequency Ranges (FCC ID K44515000)		136-174 MHz	380-520 MHz	RX: 763-776, 851-870 MHz TX: 763-776, 793-806, 806-825, 851-870 MHz
Channel Spacing	Analog	12.5/15/20/25²/30² kHz	12.5/25² kHz	12.5/25 kHz
	Digital	12.5 kHz	12.5 kHz	12.5 kHz
Frequency Stability		±1.0 ppm -22 °F to +140 °F (-30 °C to +60 °C) [+77 °F Reference (+25 °C)]		
Maximum Channels or Talkgroups		1024 (2048 and 4096 options)		
Number of Zones		255		
Maximum Channels Per Zone		255		
Power Supply		7.5 V DC ±20%		
Operating Temperature		-22 °F to +140 °F (-30 °C to +60 °C)		
Case		Reinforced polycarbonate plastic - black or high visibility (additional fee)		
Dimensions (radio with battery)	KNB-L2 (2600 mAh)	3.04/2.28 x 5.91 x 1.73 in. (77.3/58.0 x 150.0 x 44.0 mm) [W(Top/Bottom) x H x D, projections not included]		
	KNB-L3 (3400 mAh)	3.04/2.28 x 5.91 x 1.94 in. (77.3/58.0 x 150.0 x 49.4 mm) [W(Top/Bottom) x H x D, projections not included]		
	KNB-L11 (3900 mAh)	3.04/2.28 x 5.91 x 2.02 in. (77.3/58.0 x 150.0 x 51.4 mm) [W(Top/Bottom) x H x D, projections not included]		
Weight (radio with battery)	KNB-L2 (2600 mAh)	18.7 oz (530.0 g)		
	KNB-L3 (3400 mAh)	20.2 oz (574.0 g)		
	KNB-L11 (3900 mAh)	20.7 oz (586.0 g)		

Receiver		VHF	UHF	700/800 MHz
Sensitivity	P25 Digital (5% BER)	-122 dBm (0.178 μV)	-121 dBm (0.199 μV)	-120 dBm (0.224 μV)
	Analog (12 dB SINAD) @ 12.5 kHz	-122 dBm (0.178 μV)	-121 dBm (0.199 μV)	-120 dBm (0.224 μV)
Selectivity	P25 Digital	62 dB		
	Analog @ 12.5 kHz	75 dB	71 dB	65 dB
	Analog @ 25 kHz	78 dB	75 dB	70 dB
Intermodulation		77 dB		75 dB
Spurious Rejection		85 dB		83 dB
Audio Distortion		1.25% (Analog)		
Audio Output Power		Nominal 1.5 W (P25 Digital < 1% Distortion), Maximum 3 W		

Transmitter		VHF	UHF	700/800 MHz
RF Output Power		1W/6W	1W/5W	1W/3W
Spurious Emission		77 dB	76 dB	75 dB
FM Hum & Noise	Analog @ 12.5 kHz	51 dB	47 dB	43 dB
	Analog @ 25 kHz	57 dB	53 dB	49 dB
Audio Distortion		1%		
Emission Designator		11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 7K60FXD, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXW		16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F1W, 7K60FXD, 7K60FXE, 7K60F1E, 7K60F1D, 7K60F1W, 7K60FXW

MIL Standard — 810H

Low Pressure	500.6/ I, II
High Temperature	501.7/ I, II
Low Temperature	502.7/ I, II
Temp. Shock	503.7/ I
Solar Radiation	505.7/ I
Rain	506.6/ I, III
Humidity	507.6/ II
Salt Fog	509.7
Dust	510.7/ I
Vibration	514.8/ I
Immersion	512.6/I
Shock	516.8/ I, IV, VI

Encryption Options

Supported Encryption	AES, DES-OFB, ARC4 (ADP compatible)
Encryption Keys per Radio	Capable of storing 1024 keys. Programmable for 252. Common Key Reference (CKR), 252 Physical Identifier, (PID), Compatible w/ Motorola Key Variable Loader
Encryption Frame Re-sync Interval	P25 CAI 360 MSEC
Encryption Keying	External Key Loader, OTAR
Mode	OFB-Output Feedback
Encryption Type	Digital
Key Erasure	Keyboard Command, OTAR Zeroize, Tamper Detection
Standards	FIPS 140-3 Level 1, FIPS 140-3 Level 3, FIPS 197 (Pending)

Hazardous Location Standard

Certification Lab	CSA Group
Standard Applied	ANSI/TIA 4950-A-2014, UL913 5th Edition & ANSI/ISA-12.12.01-2011
Classification Rating	Intrinsically Safe: Classes I³ II, III, Division 1, Groups C, D, E, F, G Non-incendive: Class I, Division 2, Groups A, B
Approved Battery	KNB-LS7
Approved Speaker Microphones	KMC-70M, KMC-70GR, KMC-72W

International Protection Standard

Dust & Water	IP54, IP55
Immersion	IP67, IP68⁴

[1] DMR Tier III- future release

[2] 25 and 30 kHz are not included in the models sold in the USA or US territories.

[3] Division I US Group C is applicable for radio with approved battery only, or radio with approved battery and KMC-70-type speaker microphone only. If radio is in combination with any other approved accessories, Group D is applicable.

[4] IP68 = 2 m/2 hours