



# **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
  - DMR¹
  - 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)





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	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]			
radio with	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]			
oattery)	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]			
Veight	KNB-L2 (2600 mAh)	18.7 oz (530.0 g)			
radio with	KNB-L3 (3400 mAh)	20.2 oz (574.0 g)			
battery)	KNB-L11 (3900 mAh)	20.7 oz (586.0 g)			
Receiver		VHF	UHF	700/800 MHz	
	P25 Digital (5% BER)	-122 dBm (0.178 μV)	-121 dBm (0.199 μV)	-120 dBm (0.224 μV)	
Sensitivity	Analog (12 dB SINAD) @ 12.5 kHz	-122 dBm (0.178 μV)	-121 dBm (0.199 μV)	-120 dBm (0.224 μV)	
	P25 Digital	62 dB			
Selectivity	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 Rejec	tion	85 dB 83 dB			
Audio Distortio	n	1.25% (Analog)			
Audio Output F	Power	N	Iominal 1.5 W (P25 Digital < 1% Distortion), Maximum 3	N	
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	
		1%			
Audio Distortio	n		170		

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 (Pending)					
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 I II, III, Division 1, Groups C³, D, E, F, G Non-incendive: Class I, Division 2, Groups A, B, C, D				
Approved Battery	KNB-LS7				
Approved Speaker Microphones	KMC-70M, KMC-70GR, KMC-72W				
International Protection Standard					
Dust & Water IP54, IP55					

IP67, IP684

Immersion

<sup>&</sup>lt;sup>2</sup> 25 and 30 kHz are not included in the models sold in the USA or US territories.

<sup>&</sup>lt;sup>3</sup> 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.