



P25 Mission Critical

# VIKING VP900

VHF/700-800 MHz • UHF (470-520)/700-800 MHz • SN/SZ • P25 PHASE 1 & 2



The Viking® VP900 is a dual-band, multi-protocol, P25 Phase 2 radio equipped with industry leading audio, display, and advanced feature capabilities that meet the needs of police, fire, EMS, and other mission critical users.

## FEATURES

- Mixed protocol operation (Phase 1 & 2, SmartNet®/SmartZone®, FM Analog)
- Mixed protocol zones (each channel in a zone can be from a different system)
- 2048 channels
- Public safety ergonomics with large glove friendly knobs
- Top flip display changes text orientation for viewing while in holster
- Backlight on top display changes for event indication (ex. emergency turns display orange)
- Multiple visual indicators including battery health & signal strength
- 1 Watt audio output for high noise environments
- Voice annunciation & custom announcement creation
- Fully ruggedized - IP67 & MIL-STD-810 C/D/E/F
- Dual Shield design (internal metal housing & an external polycarbonate casing for exceptional durability)
- Available in three keypad options (none, limited, full)
- Integrated GPS
- MDC-1200 & GE-Star signaling
- P25 Authentication
- Encryption
  - ARC4™ software encryption; compatible w/Motorola ADP™
  - P25/TIA defined: AES-256
  - DES-OFB
  - Over-the-Air-Rekeying (OTAR)
  - VK5000 or Motorola KVL3000/KVL4000 Keyloaders

## COMPATIBLE WITH MULTIPLE P25 SYSTEMS

- EJohnson ATLAS® P25 System
- Motorola® Systems
  - Motorola Astro® 25 - P25 Phase 1 & Phase 2
  - Motorola Astro® SmartNet®/SmartZone®
- Harris VIDA® - P25 Phase 1 & Phase 2
- Airbus (formerly Cassidian) VESTA™ Radio - P25 Phase 1 & Phase 2

## ACCESSORIES

Complete line of accessories including microphones, speakers & antennas.  
Download the accessory catalog at [www.efjohnson.com/products/accessories](http://www.efjohnson.com/products/accessories).

We combine P25 design expertise with recognized quality & reliability along with smarter 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.



# Viking VP900 Portable SPECIFICATIONS

GENERAL	700/800	VHF	UHF
Frequency Range	763-805 MHz 806-869 MHz	136-174 MHz	470-520 MHz
Channel Spacing	12.5 kHz, 25 kHz <sup>1</sup>		
Max Frequency Separation	Full Bandsplit		
FCC Type Acceptance Certification	ATH2425780		ATH2425795
Canada Type Certification	IC:933B-2425780		N/A
FCC Emissions Designators	16K0F3E, 14K0F3E, 11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E	11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E	16K0F3E, 11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E
Input Voltage	7.4 V		
Dimensions (w/o antenna) HxWxD	7.5" x 2.62" x 1.75"		
Weight (w/o standard battery)	12.4 oz		
Case	Polycarbonate - black or high visibility (additional fee)		
Temperature Range	-30°C to +60°C		
Vocoder/Noise Cancellation	AMBE+2 version 1.6   TrueVoice™ noise cancellation and audio enhancement		
Programmable Front Display	Backlit LCD   Status Bar (time, date, signal strength, battery level), icon or text display options Up to 4 rows of 12 character lines		
Programmable Top Display	Backlit LCD   Status Bar (time, date, signal strength, battery level) or text display options Up to 2 rows of 12 character lines		

TRANSMITTER	700/800	VHF	UHF
RF Power Output	2.5/3 W	5 W	4 W
Frequency Stability (-30°C to +60°C)	1.5 ppm		
Modulation Limiting 25 kHz Channels	5 kHz <sup>1</sup>		
Modulation Limiting 12.5 kHz Channels	2.5 kHz		
Emissions (Conducted/Radiated)	75 dB	70 dB	
Audio Response	+1, -3 dB		
FM Hum and Noise 25 kHz Channels	49 dB1		
FM Hum and Noise 12.5 kHz Channels	43 dB		
Audio Distortion	1.5%		

RECEIVER	700/800	VHF	UHF
Audio Power Output	1 W rated		
Frequency Stability (-30°C to +60°C)	1.5 ppm		
Analog Mode Sensitivity: 12 dB SINAD	-121 dBm	-122 dBm	-121 dBm
Digital Mode Sensitivity: 5% BER	-121 dBm	-122 dBm	-121 dBm
Selectivity: 25 kHz Channels	75 dB <sup>1</sup>		
Selectivity: 12.5 kHz Channels	60 dB		
Intermodulation	75 dB	75 dB	
Spurious & Image Rejection	80 dB	70 dB	
FM Hum and Noise 25 kHz Channels	50 dB <sup>1</sup>		
FM Hum and Noise 12.5 kHz Channels	44 dB		
Audio Distortion	1%		


Note 1: 25 kHz mode is not available in US FCC frequencies in 700 MHz or VHF.

BATTERY	Dimensions (HxWxD)	Weight	Capacity
High Capacity Lithium Ion	6.5" x 2.3" x .78"	8.1 oz	3780 mAh

Specifications are measured per TIA-102.CAAA-E, TIA102.CAAB-D and per TIA-603-E.

Environmental Specifications 		
Environment	Mil Spec	810G
	M	P
Low Pressure	500.5	II
High Temp.	501.5	II
Low Temp.	502.5	II
Temp. Shock	503.5	I-D
Solar Radiation	505.5	I
Rain/Blown Rain	506.5	I
Humidity	507.5	I
Salt Fog	509.5	NA
Dust and Sand	510.5	I
Vibration	514.6	I
Shock	516.6	VI, V
Immersion	512.5	I

M=Method, P=Procedure  
Also meets equivalent superseded C, D, E, and F standards.  
Immersion meets IEC 529 IP67

Encryption Options 	
Supported Encryption	AES, DES-OFB, ARC4
Encryption Key/Radio	126 Common Key Reference (CKR), 126 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
Standards	FIPS 46-3, FIPS 81, FIPS 140-2, FIPS 197

HAZARDOUS LOCATION CERTIFICATION	
Certification Lab	FM Approvals (FM)
Standard Applied	FM3611
Classification Rating	Class 1, Division 2, Groups A, B, C, D
Approved Battery	5875700373 (identified by lack of release button & presence of key slot on bottom of battery)
Approved Speaker Microphones	5893211B18, 5893211B24, 5893211B30, 5893211G18, 5893211G24, 5893211G30 (KENWOOD Viking Premium Speaker Mic w/ options for black or high visibility & three cord lengths)