



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.

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 ¹		
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 ¹		
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 ¹		
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 ¹		
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.

All specifications are subject to change without notice. Please check the website for the latest version.
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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)

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