

P25 Mission Critical

Viking **VP900**

VHF · 700/800 MHz

P25 Phase 1 & 2 · Viking16

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 (P25 Phase 1 & 2 Trunking, P25 Conventional, Viking16, 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/G
- Dual Shield design (internal metal housing & an external polycarbonate casing for exceptional durability)
- Available in three keypad options (none, limited, full)
- Integrated GPS¹
- MDC-1200 & GE-Star signaling
- P25 Authentication
- Instant Recording Replay (IRR)
- Encryption
 - ARC4™ software encryption; compatible with Motorola ADP™
 - DES-OFB
 - AES-256 (FIPS 140-2) Single and Multi-Key
 - Over-the-Air-Rekeying (OTAR)
 - VK5000 or Motorola KVL3000/KVL4000 Keyloaders

¹Refer to the Viking VPx00 operating manual for detailed requirements & conditions for proper GPS operation.

Compatible With P25 Systems

- ATLAS® P25 Phase 1 and Phase 2
- Motorola Astro® 25 - P25 Phase 1 & Phase 2
- 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 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.

Viking VP900 Portable Specifications



General	700/800	VHF
Frequency Range	763-805 MHz 806-869 MHz	136-174 MHz
Channel Spacing	12.5 kHz, 25 kHz ¹	
Max Frequency Separation	Full Bandsplit	
FCC Type Acceptance Certification	ATH2425780	
Canada Type Certification	IC:933B-2425780	
FCC Emissions Designators	16K0F3E, 14K0F3E, 11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E	11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E
Input Voltage	7.4 V	
Dimensions (w/o antenna) HxWxD	7.5" x 2.62" x 1.75" (19.1 cm x 6.7 cm x 4.4 cm)	
Weight (w/o standard battery)	12.4 oz (351.5 g)	
Case	Polycarbonate - black or high visibility (additional fee)	
Temperature Range	-22°F to +140°F (-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
RF Power Output	2.5/3 W	5 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 dB ¹	
FM Hum and Noise 12.5 kHz Channels	43 dB	
Audio Distortion	1.5%	
Receiver	700/800	VHF
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
Digital Mode Sensitivity: 5% BER	-121 dBm	-122 dBm
Selectivity: 25 kHz Channels	75 dB ¹	
Selectivity: 12.5 kHz Channels	60 dB	
Intermodulation	75 dB	
Spurious & Image Rejection	80 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 VHF.

Battery	Dimensions (HxWxD)	Weight	Capacity
Lithium Ion	6.5" x 2.3" x .78" (16.5 cm x 5.8 cm x 2.0 cm)	8.1 oz (229.6 g)	4500 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. V.12.20.18 © Copyright 2018 EF Johnson Technologies, Inc. (E.F. Johnson Company is operating entity)

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 I, Division 2, Groups A, B, C, D	
Accessories		
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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