KENWOOD

VIKING

P25 Mission Critical

VP-900 Multi-Band

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

The Viking® VP900 is a multi-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.

P25 COMPLIANT/ MULTI-PROTOCOL

- P25 Phase 1 & Phase 2
- Supports P25 CAI (Common Air Interface)
- Compatible with Motorola® System v 7.x, Motorola Astro® & SMARTNET® II/SmartZone®
- Trunked & conventional system protocols
- Over-The-Air Rekeying (OTAR)
- MDC-1200 & GE-Star signaling
- Mixed Protocol Zones (each channel in a zone can be from a different system)

RUGGED & RELIABLE

- MIL Standard 810 G specs
- Immersion rated (IP67) (waterproof in 1 meter of water up to 30 minutes)
- Dual Shield design (internal metal housing and an external polycarbonate casing for exceptional durability)

EASY TO OPERATE

- Available in three models: no keypad, limited keypad or full keypad versions
- Top display on all three models to maximize viewing while in holster
- Controllable backlit display settings to increase visibility in all light conditions
- Backlit keypad
- Multiple visual indicators including battery level & signal strength
- Ergonomic knobs for easier operation with gloves

P25 COMPLIANT

- Supports P25 CAI (Common Air Interface, Phase 1 & Phase 2)
- Trunked and conventional system protocols Over-the-Air rekeying (OTAR)

SUPERIOR AUDIO QUALITY

- High performance speaker provides 1W nominal audio for loud & clear sound across various noise environments
- TrueVoice™ noise cancellation works in analog or digital, eliminates the need for programming noise profiles, and works with any accessory

ADVANCED FEATURES

- P25 Radio Authentication
- Programmable soft keys, menu & DTMF keys
- Up to 2048 channels
- Text messaging
- Customizable voice announcement
- Conventional vote scan is standard
- Over-The-Air Programming (OTAP) option to program radios in the field
- Armada® programming software provides simple radio fleet management including profile templates & sorting/filtering by function or agency
- Elite battery management enables wireless tracking of battery fleet
- Enhanced radio security using software and hardware system keys
- Industry-standard encryption capabilities such as AES or DES-OFB
- ARC4™ software encryption; compatible with ADP™
- Speaker microphone disconnect alarm enhances safety
- Integrated GPS

ACCESSORIES

- Complete line of accessories including speaker mics, cases, batteries, antennas & chargers. *Download the accessory catalog at **www.efjohnson.com/products/accessories.***

AMBE+2 ENHANCED DIGITAL VOCODER

P25

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	11K0F3E, 8K10F1D, 8K10F1E	16K0F3E, 11K0F3E, 8K10F1D,8K10F1E
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		
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.

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

EF Johnson Technologies, Inc.
1440 Corporate Drive, Irving, TX 75038-2401
800.328.3911 • www.efjohnson.com

JVCKENWOOD Group

P25 Products Provided by EF Johnson Technologies, Inc., a JVCKENWOOD Company