

KENWOOD



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
- Text messaging
- 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.



Making Safe, Simple™

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.

| 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) |