



EFJohnson's Viking® portfolio offers products catering to mission critical communication systems. Viking P25 subscribers offer a broad set of capabilities to fully meet the communication needs of our customer networks with interoperability, reliability, and maximum flexibility.

Viking® VP600

7/800 MHz | VHF | UHF

With a top display and 2.5 Watts of max audio, the VP600 portable offers smarter visual and audio features that make first responder communications effortless.



Designed for outstanding mission critical performance, ruggedness, and reliability, the Viking VP600 is the next generation of EFJohnson's portable radio. The Viking VP600 is a P25 Phase 2 capable radio equipped with industry leading audio, display, and advanced feature capabilities that meet the needs of police, fire, EMS and other mission critical users.

EASY TO OPERATE

- The VP600 is available in three different model variants with no keypad, limited keypad or full keypad versions
- The VP600 offers the top display on all three model variants that maximizes viewing while in holster
- Backlit displays with controllable settings to increase visibility in all lighting conditions
- Backlit keypad
- Equipped with multiple visual indicators including battery level and signal strength to check status at a glance
- Ergonomic knobs for easier operation with gloves

RUGGED & RELIABLE

- Meets 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)
- Hazardous location certification anticipated in Q1 2014

SUPERIOR AUDIO QUALITY

- High performance speaker provides 2.5W audio (1W nominal) for loud and clear sound across various noise environments
- State of the art AMBE+2 version 1.6 vocoder using TIA's latest standards

P25 COMPLIANT

- Supports P25 CAI (Common Air Interface)
- Trunked and conventional system protocols
- Over-the-Air rekeying (OTAR) functionality

FLEXIBLE

- A future proof investment with P25 Phase 2 capability
- Programmable soft keys, menu and DTMF keys
- Up to 1024 channels
- Text messaging for P25 Conventional
- Supports narrowband (12.5 kHz) & wideband (25 kHz) channel spacing with multiple system protocols
- Industry-standard encryption capabilities such as AES and DES-OFB
- Voice announcement
- Armada® programming software provides fleet management of radios as well as profile templates
- Enhanced radio security using software and hardware system keys
- Over-the-Air programming (OTAP) option enables you to program radios in the field

MULTI-PROTOCOL/MULTI-MODE CAPABILITY

- Compatible with Motorola® System v 7.x, Motorola Astro® and SMARTNET® II/SmartZone®
- MDC-1200 and GE-Star signaling

ACCESSORY SUITE

- Complete line of accessories including speaker mics, cases, batteries, antennas, and chargers



MADE IN U.S.A.

www.efjohnson.com

EFJohnson
TECHNOLOGIES

TYPICAL PERFORMANCE SPECIFICATIONS

Viking VP600 7/800 MHz | VHF | UHF

| GENERAL | 700/800 | VHF | UHF |
|-----------------------------------|---|---------------------------|---------------------------|
| Frequency Range | 762-806 MHz 806-870 MHz | 136-174 MHz | 380-470 MHz |
| Channel Spacing | 12.5 kHz, 25 kHz ¹ | | |
| Max Freq. Separation | Full Bandsplit | | |
| FCC Type Acceptance Certification | ATH2425770 | ATH2425710 | ATH2425720 |
| Canada Type Certification | IC:933B-2425770 | IC:933B-2425710 (P) | IC:933B-2425720 (P) |
| FCC Emissions Designators | 16K0F3E, 14K0F3E, 11K0F3E, 8K10F1D, 8K10F1E | 11K0F3E, 8K10F1D, 8K10F1E | 11K0F3E, 8K10F1D, 8K10F1E |
| Input Voltage | 7.4V | | |
| Dimensions (w/o antenna) HxWxD | 7.5" x 2.62" x 1.75" | | |
| Weight (w/o standard battery) | 12.2 oz | | |
| Case | Polycarbonate-black | | |
| Temperature Range | -30°C to +60°C | | |
| Vocoder/Noise Cancellation | AMBE+2 version 1.6 AMBE+2 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 5 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 dBc | | |
| Audio Response | +1, -3 dB | | |
| FM Hum and Noise 25 kHz Channels | 45 dB ¹ | | |
| FM Hum and Noise 12.5 kHz Channels | 39 dB | | |
| Audio Distortion | 3% | | |

| Receiver | 700/800 | VHF | UHF |
|--------------------------------------|-----------------------|-----|-----|
| Audio Power Output | 1 W rated 2.5 W Max | | |
| Frequency Stability (-30°C to +60°C) | 1.5 ppm | | |
| Analog Mode Sensitivity: 12 dB SINAD | -119 dBm | | |
| Digital Mode Sensitivity: 5% BER | -119 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 | 40 dB ¹ | | |
| FM Hum and Noise 12.5 kHz Channels | 34 dB | | |
| Audio Distortion | 3% | | |

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

| Battery | Dimensions (HxWxD) | Weight | Approx. Life (5/5/90) |
|---|--------------------|--------|-----------------------|
| High Capacity Lithium Ion (3780 mA hours nominal) | 6.5" x 2.3" x .78" | 8.1 oz | 10 hours |

Specifications are measured per TIA 102.CAAA-C, TIA 102.CAAB-C and per TIA 603-D.
All EFJohnson radios are made in the U.S.A.

All specifications are subject to change without notice.
Please check our website for the latest revision.
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TECHNOLOGIES

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 |
| 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 |