



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)

## 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](http://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 <sup>1</sup>		
Max Freq. Separation	Full Bandsplit		
FCC Type Acceptance Certification	ATH2425770	ATH2425710 (Pending)	ATH2425720 (Pending)
Canada Type Certification	IC:933B-2425770	IC:933B-2425710 (P)	IC:933B-24275720 (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 <sup>1</sup>		
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 <sup>1</sup>		
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 <sup>1</sup>		
Selectivity: 12.5 kHz Channels	60 dB		
Intermodulation	75 dB		
Spurious & Image Rejection	80 dB		
FM Hum and Noise 25 kHz Channels	40 dB <sup>1</sup>		
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. 1.16.13 © Copyright 2013 EFJohnson

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**Environmental Specifications**



Environment	Mil Spec	810G
Low Pressure	M	P
	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