



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

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 (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 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. 1.16.13 © Copyright 2013 EFJohnson

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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