



EFJohnson's Viking™ Solution 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™ FIRE

7/800 MHz | VHF | UHF

The Viking FIRE portable offers smarter visual and audio features that make fire responder communications effortless while ensuring situational awareness through patented FIREsafe™ software features.



Designed and engineered specifically for firefighters with patented safety and awareness enhancing FIREsafe software, the Viking FIRE features high visibility housing and blade knobs for ease of operation with fire gloves.

EASY TO OPERATE

- Top display that maximizes viewing while in holster or pouch
- Voice announcement provides audio feedback for handsfree easy operation
- Standard high visibility housing
- Backlit keypad and displays for visibility in all lighting conditions
- Equipped with visual indicators including battery level and signal strength to check status at a glance
- Blade knobs for easier operation with fire gloves

RUGGED & RELIABLE

- Meets MIL Standard 810 G specs
- Immersion rated (IP67) Standard (*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 capable of 2.5W audio (*1W rated*) for loud and clear sound across various noise environments
- Industry's best noise cancelling; does not require directional adjustment or software changes for different noise environments
- State of the art AMBE+2 version 1.6 vocoder compliant to TIA's latest standards

PATENTED FIRESAFE™ SOFTWARE

- Customized feature set for Fire Commander & Responders
- Evacuation Alert Tones
- Visual & Audible Range Indicators (tones & LED)
- Out of Range Alert Tones
- P25 Auto Switch (analog/P25 automatic mode change)
- Com Check (out of range communication check)
- Set & Forget (single button lock function)

ADVANCED FEATURES

- Available in VP600 (single band) or VP900 (multi-band)
- Up to 2048 channels
- Industry-standard encryption capabilities such as AES and DES-OFB (*Single key DES-OFB included*)
- Over-the-Air programming (OTAP) option enables you to program radios in the field (*Works with any P25 data compliant network*)
- Over-the-Air rekeying (OTAR) functionality
- FM Certification available in 2013

MULTI-PROTOCOL/MULTI-MODE CAPABILITY

- Supports P25 CAI (Common Air Interface, Phase I & II)
- Trunked and conventional system protocols
- Compatible with Motorola® System v 7.x, Motorola Astro® and SMARTNET® II/SmartZone®
- MDC-1200 and GE-Star signaling
- Channel by channel selection (as opposed to zone selection of different protocol/system talkgroups or channels)

ACCESSORY SUITE

- Complete line of accessories including speaker mics, cases, batteries, antennas, and chargers
- Programming with ARMADA™ Fleet Management Software



MADE IN U.S.A.

www.efjohnson.com

EFJohnson
TECHNOLOGIES

TYPICAL PERFORMANCE SPECIFICATIONS

Viking FIRE 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	IC:933B-24275720
FCC Emissions Designators	16K0F3E, 14K0F3E, 11K0F3E, 8K10F1D, 8K10F1E	11K0F3E, 8K10F1D, 8K10F1E	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)	12.2 oz		
Case	Polycarbonate-high visibility black casing is optional		
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		
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%		

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

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

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.
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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

Factory Mutual Approvals



FM 3640 (Pending)		
Class I/ Class II	Division 1 An area where there is or could be an explosive atmosphere most of the time in normal conditions.	C. Ethylene D. Propane and Methane E. Conductive metal F. Carbonaceous material coal, coke dust G. Grain dust and flour
Class III	Division 1 Location in which easily ignitable fibers or materials producing combustible flyings are handled, manufactured, or used.	Ignitable fibers or flyings
Non-Incendive		
Class I	Division 2 An area where an explosive atmosphere exists only as a result of a fault.	A. Acetylene B. Hydrogen C. Ethylene D. Propane and Methane