



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.

AN/PRC127EFJ

UHF | VHF

The AN/PRC127EFJ radio provides tactical and secure AES, intra-squad communications at the lowest echelons for Counterinsurgency Operations Command and Control.



NSN: 5820-01-567-6589
UHF Model

NSN: 5820-01-567-6582
VHF Model

COMBAT LAND MOBILE RADIO (CLMR)

- Lightweight aluminum casting & polycarbonate housing is strong and has immersion rating (IP67 Standard)
- Meets applicable MIL Standard 810C, D, E, and F specs
- JF 12 Certified
- FM intrinsically safe (VHF radios only)

P25 COMPLIANT

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

FLEXIBLE

- Supports narrowband (12.5 kHz) & wideband (25 kHz) channel spacing with multiple system protocols
- Industry-standard encryption capabilities such as AES, DES-OFB, DES, and FIPS 140-2
- Easy radio programming & feature updating with EFJohnson's PC Configure™ software

ACCESSORY SUITE

- Complete line of accessories including speaker mics, cases, NiMH and Li-Ion batteries, and chargers



MADE IN U.S.A.

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TECHNOLOGIES

TYPICAL PERFORMANCE SPECIFICATIONS

AN/PRC127EFJ UHF | VHF

GENERAL	VHF	UHF R1
Frequency Range	136-174 MHz	380-470 MHz
Channel Spacing	12.5 kHz, 25 kHz	
Max Freq. Separation	Full Bandsplit	
FCC Type Acceptance Certification	ATH2425111	ATH2425131
Canada Type Certification	IC:933B-2425112	IC:933B-2425131
FCC Emissions Designators	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D
Input Voltage	7.2V	
Dimensions (w/o antenna) HxWxD	6.7" x 2.52" x 1.8" (6.4 cm x 17.0 cm x 4.6 cm)	
Weight (w/o standard battery)	11 oz. (312 g)	
Case	Polycarbonate-black Immersion rated option available for all housings	
Temperature Range	-30°C to +60°C	
Vocoder	AMBE+2	

Transmitter	VHF	UHF R1
RF Power Output	5/1 W	4/1 W
Frequency Stability (-30°C to +60°C)	±1.5 ppm	
Modulation Limiting 25 kHz Channels	±5 kHz	
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	
FM Hum and Noise 12.5 kHz Channels	-40 dB	
Audio Distortion	2%	

Receiver	VHF	UHF R1
Audio Power Output	500 mW	
Frequency Stability (-30°C to +60°C)	±1.5 ppm	
Analog Mode Sensitivity: 12 dB SINAD	0.25 uV (-119 dBm)	
Digital Mode Sensitivity: 5% BER	0.25 uV (-119 dBm)	
Selectivity: 25 kHz Channels	-75 dB	
Selectivity: 12.5 kHz Channels	-63 dB	
Intermodulation	-75 dB	
Spurious & Image Rejection	-75 dB	
FM Hum and Noise 25 kHz Channels	-40 dB	
FM Hum and Noise 12.5 kHz Channels	-35 dB	
Audio Distortion	2%	

Battery	Dimensions (HxWxD)	Weight	Approx. Life (5/5/90)
Extra-High Capacity NiMH	6.0" x 2.3" x 0.85"	12.96 oz	UHF/VHF: Minimum 10 hours 700/800 MHz: Minimum 12 hours
Extra-High Capacity NiMH, IS	6.0" x 2.3" x 0.85"	12.96 oz	UHF/VHF: Minimum 10 hours 700/800 MHz: Minimum 12 hours
Alkaline Battery Clamshell	7.2" x 2.6" x 2.0"	15.68 oz w/12 AA Battery	14-16 hours
High Capacity Lithium Ion	6.5" x 2.3" x .78"	8.1 oz	12 hours

Specifications are measured per TIA 102.CAA-B, TIA 102.CAAB-B and per TIA 603-C.
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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1440 Corporate Drive, Irving, TX 75038-2401 • www.efjohnson.com
Phone: 972.819.0700 • Toll Free: 1.800.328.3911 • Fax: 972.819.2307

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Environmental Specifications

Environment	Mil Spec	810F
	M	P
Low Pressure	500.4	II
High Temp.	501.4	I, II
Low Temp.	502.4	I, II
Temp. Shock	503.4	I
Solar Radiation	505.4	I
Rain/Blown Rain	506.4	I, III
Humidity	507.4	NA
Salt Fog	509.4	NA
Dust and Sand	510.4	I
Vibration	514.5	I (24)
Shock	516.5	I, IV
Immersion*	512.4	I

M=Method, P=Procedure, *=Optional
Also meets equivalent superseded C, D and E standards.

Encryption Options

Supported Encryption	AES, DES, DES-OFB
Encryption Key/Radio	64 Common Key Reference (CKR), 64 Physical Identifier, (PID), Compatible w/ Motorola Key Variable Loader
Encryption Frame Re-sync Interval	P25 CAI 360 MSEC
Encryption Keying	External Key Loader, OTAR
Synchronization	CFB-Cipher Feedback OFB-Output Feedback
Vector Generator	National Institute of Standards and Technology (NIST) Approved random number generator
Encryption Type	Digital
Key Erasure	Keyboard Command
Code Key Initialization	Internal Pseudorandom Generator
Standards	FIPS 46-3, FIPS 81, FIPS 140-2, FIPS 197

Factory Mutual Approvals

Intrinsically Safe		C. Ethylene D. Propane and Methane E. Conductive metal F. Carbonaceous material coal, coke dust G. Grain dust and flour
Class I/ Class II	Division 1 An area where there is or could be an explosive atmosphere most of the time in normal conditions.	
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