## KENWOOD

# P25 Mission Critical

700/800 MHz • VHF • UHF • SN/SZ • P25 PHASE 1 & 2

With a top display and best in the industry audio performance, the VP400 single band portable offers smarter visual and audio features that make first responder communications effortless.

#### **FEATURES**

#### Choose operation in either:

Motorola SmartNet<sup>®</sup>/SmartZone<sup>®</sup> protocol --- **OR** --P25 Phase 1 trunked/conventional & P25 Phase 2 trunked

- 1024 channels
- Public safety ergonomics with large glove friendly knobs
- Top flip display changes text orientation for viewing while in holster
- Backlight on top display changes for event indication (ex. emergency turns display orange)
- Multiple visual indicators including battery health & signal strength
- 1 Watt audio output for high noise environments
- Voice annunciation & custom announcement creation
- · Fully ruggedized IP67 & MIL-STD-810 C/D/E/F
- Dual Shield design (internal metal housing & an external polycarbonate casing for exceptional durability)
- Available in three keypad options (none, limited, full)
- MDC-1200 & GE-Star signaling
- P25 Authentication
- Encryption
  - ARC4™ software encryption; compatible w/Motorola ADP™
  - P25/TIA defined: AES-256
  - DES-OFB
  - VK5000 or Motorola KVL3000/KVL4000 Keyloaders

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#### COMPATIBLE WITH MULTIPLE P25 SYSTEMS

- EFJohnson ATLAS® P25 System
- Motorola<sup>®</sup> Systems
  - Motorola Astro<sup>®</sup> 25 P25 Phase 1
    & Phase 2
  - Motorola Astro® SmartNet®/ SmartZone®
- Harris VIDA<sup>®</sup> P25 Phase 1 & Phase 2
- Airbus (formerly Cassidian) VESTA™ Radio - P25 Phase 1 & Phase 2

#### ACCESSORIES

Complete line of accessories including microphones, speakers & antennas. Download the accessory catalog at www.efjohnson.com/products/accessories.

We combine P25 design expertise with recognized quality & reliability along with smarter technology to make KENWOOD Viking radios simple to use & maintain.



#### Perpetual Software Licensing

Adds greater value to your radios by extending the life of the software into your next hardware platform — you own the software option forever, and your licenses are simple to manage with our cloud-based tool — Vault™.





#### Armada<sup>®</sup> Fleet Management

Update radios in a group rather than one at a time. One template programs both portables & mobiles. Supports either direct computer connection or Over-the-Air Programming (OTAP). Elite battery management enables wireless tracking of battery fleet.



#### TrueVoice<sup>™</sup> Noise Cancellation

Software-based noise cancellation automatically filters out noise source frequencies and eliminates the need for extra configuration. Works in analog or digital mode and with any accessory.

### Viking VP400 Portable SPECIFICATIONS

GENERAL	700/800	VH	F	UHF
Frequency Range	762-806 MHz 806-870 MHz	136-174	4 MHz	380-470 MHz
Channel Spacing	12.5 kHz, 25 kHz <sup>1</sup>			
Max Freq. Separation	Full Bandsplit			
FCC Type Acceptance Certification	ATH2425770	ATH242	ATH2425710	
Canada Type Certification	IC:933B-2425770	IC:933B-2	425710	IC:933B-24275720
FCC Emissions Designators	16K0F3E, 14K0F3E, 11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E	11K0F3E, 8K10F1D,	8K10F1E, 8K10F7E	11K0F3E, 8K10F1D, 8K10F1E, 8K10F7E
Input Voltage	7.4V			
Dimensions (w/o antenna) HxWxD	7.5″ x 2.62″ x 1.75″			
Weight (w/o standard battery)	12.6 oz			
Case	Polycarbonate-black; Mil-spec camoflauge options			
Temperature Range		-30°C to +60°	°C	
Vocoder/Noise Cancellation	AMBE+2 version	1.6   TrueVoice™ noise cano	cellation and audio en	hancement
Programmable Front Display	Backlit LCD   Status Bar (time, date, signal strength, battery level), icon or text display options Up to 4 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	els 5 kHz <sup>1</sup>			
Modulation Limiting 12.5 kHz Channe	ls		2.5 kHz	
Emissions (Conducted/Radiated)		75 dBc		
Audio Response		+1,-3 dB		i
FM Hum and Noise 25 kHz Channels		50 dB	56 dB1	47 dB
FM Hum and Noise 12.5 kHz Channels		44 dB	50 dB	47 dB
Audio Distortion		1%		17 45
RECEIVER		700/800	VHF	UHF
Audio Power Output				
Frequency Stability (-30°C to +60°C)		1.5 ppm		
Analog Mode Sensitivity: 12 dB SINAD		-120 dBm	-122 dBm	-119 dBm
Digital Mode Sensitivity: 5% BER		-120 dBm	-122 dBm	-119 dBm
Selectivity: 25 kHz Channels		75 dB1		
Selectivity: 12.5 kHz Channels	hannels 60 dB			
Intermodulation		75 dB		
Spurious & Image Rejection		80 dB		
FM Hum and Noise 25 kHz Channels		50 dB1		
FM Hum and Noise 12.5 kHz Channels		44 dB		
Audio Distortion		1.5%		

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

BATTERY	Dimensions (HxWxD)	Weight	Capacity
High Capacity Lithium Ion	6.5″ x 2.3″ x .78″	8.1 oz	3780 mAh

Specifications are measured per TIA 102.CAAA-C, TIA 102.CAAB-C and per TIA 603-D.

All specifications are subject to change without notice. Please check the website for the latest version. V.04.06.17 © Copyright 2017 EF Johnson Technologies, Inc. (*E.F. Johnson Company is operating entity*) AMBE+2<sup>w</sup> is a trademark of Digital Voice Systems Inc.

Environmental Specifications		
Environment	Mil Spec	810G
	М	Р
Low Pressure	500.5	II
High Temp.	501.5	II
Low Temp.	502.5	I
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	FIPS VALIDATED 140 2	
Supported Encryption	AES, DES-OFB, ARC4	
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	

HAZARDOUS LOCATION CERTIFICATION		
Certification Lab	FM Approvals (FM)	
Standard Applied	FM3611	
Classification Rating	Class I, Division 2, Groups A, B, C, D	
Approved Battery	5875700373 (identified by lack of release button & presence of key slot on bottom of battery)	
Approved Speaker Microphones	5893211B18, 5893211B24, 5893211B30, 5893211B18, 5893211G24, 5893211G30 (KENWOOD Viking Premium Speaker Mic w/ options for black or high visibility & three cord lengths)	

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