

KENWOOD



P25 Mission Critical

VM-600 Single-Band

700/800 MHz

Multi-system P25 Phase 2 radio equipped with industry leading audio, color display and advanced features including Over-the-Intranet (OTIP) programming.

ROBUST & FLEXIBLE

- Compatible with Motorola® System v 7.x, Motorola Astro® & SMARTNET® II/SmartZone®
- All supported protocols (Phase 1 & 2, Motorola SMARTNET® II/SmartZone®, FM Analog) available simultaneously
- Advanced P25 features such as Authentication & Over-the-Air-Rekeying
- Industry-standard encryption capabilities: AES & DES-OFB
- ARC4™ software encryption; compatible with ADP™
- Conventional vote scan is standard
- Supports MDC-1200 and GE-Star signaling
- Up to 1024 channels
- Over-the-Air programming (OTAP) option enables you to program radios in the field
- Over-the-Intranet programming (OTIP) allows you to program radios through a wireless access point or Ethernet interface
- Enhanced radio security using software & hardware system keys
- Armada® programming software provides simple fleet management of radios with features including profile templates & sorting/filtering by function or agency

DATA & CONTROL INTERFACES

- Supports P25 IP packet data
- GPS AVL data (requires external GPS receiver)

MULTIPLE CONFIGURATION OPTIONS

- Dash mount
- Remote mount
- Dash mount with remote control head
- Dual remote control heads
- Internal or external speaker
- Fixed control stations

OPTIONAL VIKING® CONTROL HEAD

- Display resolution: 480 x 128 pixels
- Transmissive color display - high contrast for direct sunlight & night time viewing; not affected by polarized sunglasses
- Wide viewing angle - 120°

ACCESSORIES

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



Viking VM600 Mobile SPECIFICATIONS

GENERAL	700/800 MHz
Frequency Range (band splits)	762 - 805 MHz 806 - 869 MHz
Channel Spacing	Analog: 25 kHz, 12.5 kHz P25 Digital (Phase 1 and 2): 12.5 kHz; supports 2-slot Phase 2 TDMA
Max Frequency Separation	Full Band Split
Display	Viking Control Head - transmissive color display, 16 display text characters plus Zone, Channel, and Status, blue illumination theme
Power Supply	Nominal Voltage (negative ground) 13.6 VDC Operating Supply Voltage Range 10.9 - 16.3 VDC Standby Current 1.0 A Receive Current at Rated Audio Power 2.95 A Current at Max Rated Transmit Power 12.5 A
Temperature Range	Operating: -30°C to +60°C; Storage: -40°C to +85°C
Nominal Dimensions (H x W x D) exclusive of mounting, cables, & knobs	2.1" x 7.2" x 8.3" (5.3 cm x 18.3 cm x 21.1 cm)
Nominal Weight	6.5 lbs (2.3 kg)
FCC ID:	ATH2425M80 (Pending)
Industry Canada	IC:933B-2425M80 (Pending)
Vocoder	AMBE+2 (version 1.6)
Transmitter	700/800 MHz, 30/35 W; VHF, 50 W
TRANSMITTER	700/800 MHz
RF Output Power (variable)	15 to 25 W (700 MHz) 15 to 35 W (800 MHz)
Transmitter Frequency Ranges	762 - 775 MHz, 792 - 805 MHz 806 - 824 MHz, 851 - 869 MHz
Maximum Frequency Separation	Full Band Split
Frequency Accuracy (-30°C to +60°C, +25°C ref.)	±1.5 ppm
Modulation Limiting	25 kHz Channels (Analog): ±5 kHz 12.5 kHz Channels (Analog): ±2.5 kHz
Modulation Fidelity (Digital)	<5% C4FM (Phase 1) <5% H-CPM (Phase 2)
Spurious Emissions	75 dB
Audio	Analog Frequency Response +1 dB, -3 dB (Per TIA-603-D) FM Hum and Noise Ratio (25 kHz Analog) 46 dB FM Hum and Noise Ratio (12.5 kHz Analog) 40 dB Distortion 2%
FCC Emission Designators	8K10F1D, 8K10F1E, 8K10F7E, 11K0F3E, 14K0F3E, 16K0F3E
RECEIVER	700/800 MHz
Receiver Frequency Ranges	792 - 805 MHz 851 - 870 MHz
Maximum Frequency Separation	Full Band Split
Sensitivity	Analog Mode: 12 dB SINAD -119 dBm Digital Phase 1: (5% BER) -119 dBm Digital Phase 2: (5% BER) -119 dBm
Selectivity (Adjacent Channel Rejection)	25 kHz Channels, Analog 75 dBm 12.5 kHz Channels, Analog 60 dBm Digital Phase 1 60 dBm Digital Phase 2 60 dBm
Intermodulation	80 dB
Spurious Response Rejection	80 dB
Audio	Analog Frequency Response +1 dB, -3 dB (per TIA-603-D) Hum and Noise Ratio (25 kHz Analog) 46dB Hum and Noise Ratio (12.5 kHz Analog) 40dB Output Power (3Ω load) 15 W Distortion <2%

Environmental Specifications I		
Environment	Mil Spec	810G
	M	P
Low Pressure	500.5	II
High Temp.	501.5	I, II
Low Temp.	502.5	I, II
Temp. Shock	503.5	I (D)
Solar Radiation	505.5	I (A1)
Rain/Blown Rain	506.5	I, III
Humidity	507.5	II
Salt Fog	509.5	NA
Dust and Sand	510.5	I, II
Vibration	514.6	I (4), II
Shock	516.6	I, II, V, VI
M=Method, P=Procedure Also meets equivalent superseded C, D and E standards.		

Encryption Options FIPS VALIDATED 140-2	
Supported Encryption	AES, DES, 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
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



Viking® Control Head



Standard Control Head

All specifications are subject to change without notice. Please check the website for the latest version.
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JVCKENWOOD Group

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