P25 KVL 5000

NEXT GENERATION ENCRYPTION KEY LOADER ENSURES SECURE INTEROPERABLE COMMUNICATIONS WITH EASE

The Motorola Solutions Key Variable Loader (KVL) 5000 allows programmers to generate, transport and load encryption keys securely and efficiently into communication products. Packaged in an easy to use one-handed design with an intuitive UI, the KVL 5000 integrates with Key Management Facility (KMF) by provisioning radios to use Over The Air Rekeying (OTAR).

Designed to meet the requirements of two-way radio programmers, the purpose-built KVL 5000 delivers a quick start and snappy response for easy and efficient key loading - without interrupting the rest of their workflow. The only keyloader that can protect keys with a hardware protected keystore, the KVL 5000 provides users with the highest level of secure programming and information protection.

KVL 5000 FEATURES

- FIPS 140-3 Level 2 keyloader
- Hardware Security Module (HSM) to protect keys
- Automatic key load
- Dead battery operation
- AES included
- Hardened out of the box

COMPATIBILITY

Compatible with existing KVL 3000/3000+/4000 keyloaders and keyloading cables.

OPTIONAL ACCESSORIES

- USB modem
- USB programming cable

KVL 5000 ENABLES

- Encrypted communications
- OTAR (KMF Managed)
- Tactical OTAR (KVL Managed)
- Store and forward
- Key creation
- Aftermarket algorithm upgrades
- Radio authentication provisioning
- Control head keyloading





KVL 5000 PORTABLE SPECIFICATIONS

PHYSICAL CHARACTERISTICS

145 mm (5.71 in)
76 mm (2.99 in)
37 mm (1.46 in)
300 g (10.6 oz)
Up to 10 hours of typical keyloading operation
Up to 10 hours of typical keyloading operation

USER INTERFACE	
Display	3.2" Touch Display Transflective, Full Color Portrait/Landscape Display Support Tempered Glass Display
Connectors/Ports	RS232/DB9, USB-micro, MX-style keyload
Remote Connection to KMF/AuC	IP Network: USB-micro to Ethernet Adapter Dial-Up: USB Modem (USB to RJ-11)

ENCRYPTION SPECIFICATIONS		
Supported Systems	ASTRO 25 7.13 or later	
Supported Algorithms	AES, DES-OFB, DES-XL, DVI-XL, DVP-XL, ADP	
Supported Modes	ASTRO 25 Keyloading, USB Keyloading, Radio Authentication	

SUPPORTED PRODUCTS

APX 900*		
APX N30*		
APX 1500*		
APX 2000		
APX 2500		
APX 3000		
APX 4000	KMF	
APX N50	CDEM	
APX 4500	WAVE CRYPYR	
APX 5000	CRYPTR Micro	
APX 5500	MCC 7500 VPM	
APX 6000	MCC 7500E CRYPTR	
APX N70	PDEG	
APX 6500		
APX 7000		
APX 7500		
APX 8000		
APX NEXT		
APX 8500		

* SW AES Only

WHAT'S IN THE BOX

- KVL 5000 Unit (P25 software, AES algorithm, hardened by default)
- Battery
- Charging cable (USB-micro)
- Quick Start Guide

WHY KVL 5000?

- Only keyloader with HSM to protect keys
- Purpose built device
- One piece design
- One handed operation
- Rugged (IP54, MIL-STD)
- Multiple keyload
- Ability to create, use, and erase keys
- KMF support
- Key sharing (KVL 4000 to KVL 5000, KVL 3000+ to KVL 5000, KVL 5000 to KVL 5000)
- Quick Startup

UNSUPPORTED PRODUCTS		
ASTRO Saber	XTS 4000 (ARMOR-based)	
ASTRO Spectra	XTS 5000	
Any ARMOR-based product	DIU	
XTL 5000 (ARMOR-based)	MGEG	
XTS 3000 (ARMOR-based)	RNC	

REGULATORY COMPLIANCE AND APPROVALS		
FIPS 140-3 Level 2	Compliant	
Electromagnetic Compatibility	FCC Part 15 Class A Emission, EN55022 Class A Emission, EN50392 RF Exposure	
Safety	EN60950, EN62368, UL/cUL, RoHS IP54	
MIL-STD	Shock - MIL STD 810G 516.6 I Drop - MIL STD 810G 516.6 IV Vibration - MIL STD 810G 514.6 I/24	

ENVIRONMENTAL	
Operating Temperature	-10°C to +50°C
Storage Temperature	-40°C to +70℃
Ingress Protection	IP 54
ESD Protection	EN 55024
Humidity	MIL STD 810G (507.5 II/Agg)

For more information, visit motorolasolutions.com/astro-security.



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, II 60661 U.S.A. motorolasolutions.com

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2023 Motorola Solutions, Inc. All rights reserved. 04-2023 [EV12]