DIMETRA KVL 4000

KEY VARIABLE LOADER WITH OPTIONS FOR EITHER AES128 OR AES256 END TO END ENCRYPTION

The DIMETRA™ KVL 4000 is Motorola Solutions' Key Variable Loader (KVL) for End-to-End Encryption-enabled Motorola Solutions TETRA products. Based on the MC55E0 PDA, this PDA style key loader is provided with features and a user interface for increased efficiency and programming flexibility. A large LCD colour display paired with an easy to use alphanumeric keypad enables simple viewing and data entry.

Designed to meet the requirements of crypto custodians, this powerful device offers the industry-standard Microsoft Windows Embedded 6.5 Operating System.

Built with legendary Motorola Solutions quality and security, this compact, rugged device is built to withstand everyday use in harsh mobile environments. Motorola Solutions provides its customers with secure programming, ensuring your information is never compromised.

SLEEK, RUGGED, AND LIGHTWEIGHT
Built to withstand everyday programming use in local authority, commercially sensitive, government and public safety environments. Meets MIL-STD specifications for sealing and drop.

PDA FORM FACTOR AND USER INTERFACE
The KVL utilises PDA MC55E0, which brings rugged functionality to encryption keyfill and management.

- Large 3.5 inch 640 x 480 colour display with day/night modes and multi-level backlighting
- Touch screen interface whilst navigating and accessing information is fast and simple
- Ingress protection to IP54

KEY MANAGEMENT
- Creates, stores and transfers key encryption keys and algorithms into secure devices
- Supports manual entry of E2EE keys
- Manual configuration of Cryptogroups and Associations
- Supports key sharing among KVL's and with Motorola Solutions' Key Management Facility
- Store and Forward messages
- Maintains a record of the most recent 250 keyload operations

STANDARD FEATURES
The standard KVL 4000 ships complete with the following:

- MC55 PDA
- Security adapter
- Battery charger
- 3600 mAH Li-Ion battery
- User Manual

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COMPATIBILITY*

- Backwards and forward compatibility with existing KVL3000/3000+ keyloaders being used for End-to-End Encryption
- Legacy keyloading cables

HARDWARE SECURITY ADAPTOR

- Safe, Secure Storage of Keys, Tamper protection and response
- Combination of easy to use PDA MMI and high security module
- FIPS140-2 level 3 design

POWERED BY MICROSOFT'S WINDOWS® EMBEDDED 6.5 OPERATING SYSTEM

- Organise and manage encryption keys and radio encryption
- MC55E0 Networking capabilities

AUTOMATIC KEY GENERATION

Auto-generation of a single key and of key sets

AUTHORISATION AND SECURITY

- Separate Operator and Administrator authentication enables appropriate authorisation of key management, firmware upgrades and changes
- User timeout – Automatically logs the user out after a specified period of inactivity
- Optional Enhanced Security – adds password protection of the Operating System and prevents use of unsigned applications and wireless communication

DEAD BATTERY OPERATION

- Ability to operate the KVL including key management and key downloading while charging
- Optional infinite key retention

OPTIONAL ACCESSORIES

- Battery Charger
- USB Modem
- USB programming cable

PHYSICAL CHARACTERISTICS (PDA AND SECURITY ADAPTER TOGETHER)		
Dimensions	Length	216 mm
	Width	84 mm
	Depth	39 mm
Weight	KVL with rechargeable Lithium-Ion battery	
Batteries	3600 mAH Lithium-Ion Up to 10 hours of continuous keyloader operation – typically 7400 keyfills	

USER INTERFACE	
Display	88.9 mm 480 line, 240 character 640 x 280 pixel QVGA resistive touch-panel screen with LED backlight
Keypad	QWERTY Keyboard
RS232/DB-9 Connector	yes
USB Type A Port	yes
MX-style keyload port	yes

ENCRYPTION SPECIFICATIONS	
Manually Auto Generated keys	1024 Maximum
Auto Generation of keys at one time	100 Maximum
Manually Entered Associations (also called talkgroups)	50 Maximum
Manually Entered Association Sets	10 Maximum
Supported Systems Include	DIMETRA IP System Release 5.0 onwards, DIMETRA IP Compact Release 3.0 onwards, DIMETRA IP Micro Release 3.0 onwards
Supported Algorithms	AES128 compliant with ETSI TETRA Standards AES 256 compliant with ETSI TETRA Standards
Standards	Provides key load for radios and other devices that are compliant with TCCA SFPG Recommendation 02

OPTIONAL FEATURES		
Operating System Security Hardening	Advanced Security Settings	Prevents installation or launch of applications whose certificates are unknown
		Disables WiFi Network
		Disables Bluetooth Communication
		Requires a password to be set on the Operating System

REGULATORY COMPLIANCE AND APPROVALS	
Electromagnetic Compatibility	EN55022 Class A Emission, EN50392 RF Exposure, EN60950-1
Safety	UL/cUL 60950-1, CE

ENVIRONMENTAL	
Disposal	RoHS, WEEE & REACH, CMM & CCC Compliant
Operating Temperature	-10 to +50 degrees C
Storage Temperature	- 40 to +70 degrees C
Ingress Protection	IEC IP54
ESD Protection	±15kV air; ±6kV contact
Humidity	95% max, non-condensing
Drop	1.2m (3.49 feet)

*Only TETRA capable subscribers and infrastructure supported. Not compatible with PCMCIA cards. Contact your local sales representative for a complete list of supported products.

Specifications are subject to change without notice. All specifications shown are typical and issued for guidance only.

For more information on the KVL 4000 please visit us on the web at: www.motorolasolutions.com/TETRA

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