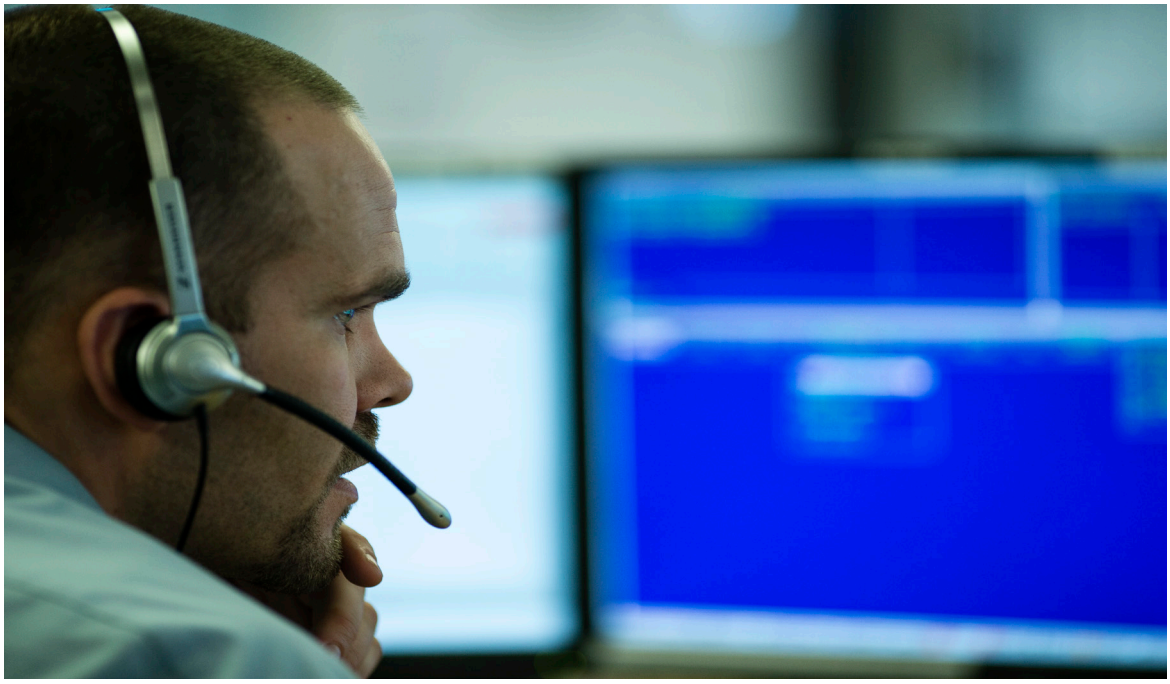


## A SECURE, SCALABLE, AND PROVEN KEY MANAGEMENT SOLUTION

# KEY MANAGEMENT FACILITY

Manage the inherent complexity within your network and gain greater visibility of your entire fleet of devices deployed in the field. Implementing a robust P25 compliant Key Management Facility (KMF) solution allows for more control, faster maintenance, and ensure that your information is protected with enhanced security features.
Keep your devices deployed in the field where they matter most, not in the shop. Eliminate downtime, reduce administrative costs, and allow your devices to respond quicker to changing conditions by automating routine and emergency updates to all your land mobile radios, In-line Network Encryptors (INE), and secure mobile phones.

## FEATURES

Remotely transfer essential key management messages to devices via Over-The-Air Rekeying (OTAR). Whether the device is in your office or on the other side of town OTAR can send messages to update a device's keys, poll the device, inhibit the device, and erase the device's keys. Devices can also request key updates, send key management messages, and acknowledge events back to the KMF.

All sensitive key information and key management messages within the system are protected by the FIPS140-2 certified KMF CRYPTR.

A mid and high tier Key Management Facility solutions are available to enhance your operations in order to meet the demand required by your organization. Tiering is based on the number of end users, partitions (agencies) and clients required.

**FIPS 140-2 Level 2 Compliant**
- Certification #1831

**Tier Options**
- Based on # of users, partitions, clients

**Robust Feature Set**
- OTAR
- Store & Forward
- Secure User Group Management
- Device and Group Key Currency
- Retry Opportunities
- Remote Inhibit / Enable
- Key Material Generation
- KMF Hello
- KMF Redundancy

**System Components Include**
- Windows ®2008 Server
- KMF Server and Client Software
- Windows 7® Client
- KMF CRYPTR

## OVER-THE-AIR REKEYING (OTAR)

Eliminate the burden of manually rekeying your devices on a regular basis. OTAR is a powerful suite of operations that enables key distribution and key management to be conducted securely over-the-air. OTAR solves the logistical problem of maintaining secure wireless communications.

## STORE & FORWARD

The KMF can be used in conjunction with the Motorola KVL 3000+ or KVL 4000 Key Variable Loader (KVL) to perform Store & Forward operations. During the rekeying operation, associations between units and the KVL can be performed directly from the user interface. Store & Forward permits a user to reach those units that may be out of range and enables an operator to become more efficient with managing their system. The KVL is capable of transferring the rekey messages originated within the KMF server database to a radio or infrastructure device. Each unit's response is securely stored inside the KVL and then forwarded directly back to the KMF. The KMF user interface shows an operator which units successfully acknowledged the rekey message for easy key management.

## SECURE USER GROUP MANAGEMENT

An innovative concept for managing secure radio communications among user groups, known as Common Key Reference (CKR) is provided with the KMF. Through the CKR concept, an operator is able to visually track the members and encryption keys assigned to each CKR group. In a single CKR update operation, a new key to all members of the group can be sent via OTAR.

## DEVICE AND GROUP KEY CURRENCY

The KMF tracks whether or not devices have the current encryption keys and parameters. This allows the system manager to quickly find devices that are not up-to date.

## RETRY OPPORTUNITIES

The KMF offers automated retries of rekey messages when an operator initiates key updates.

## REMOTE INHIBIT / ENABLE

Securely inhibit a compromised devices over-the-air and protect the integrity of your network. When the device is recovered, remotely enable it and securely allow it to re-join the network.

## KEY MATERIAL GENERATION

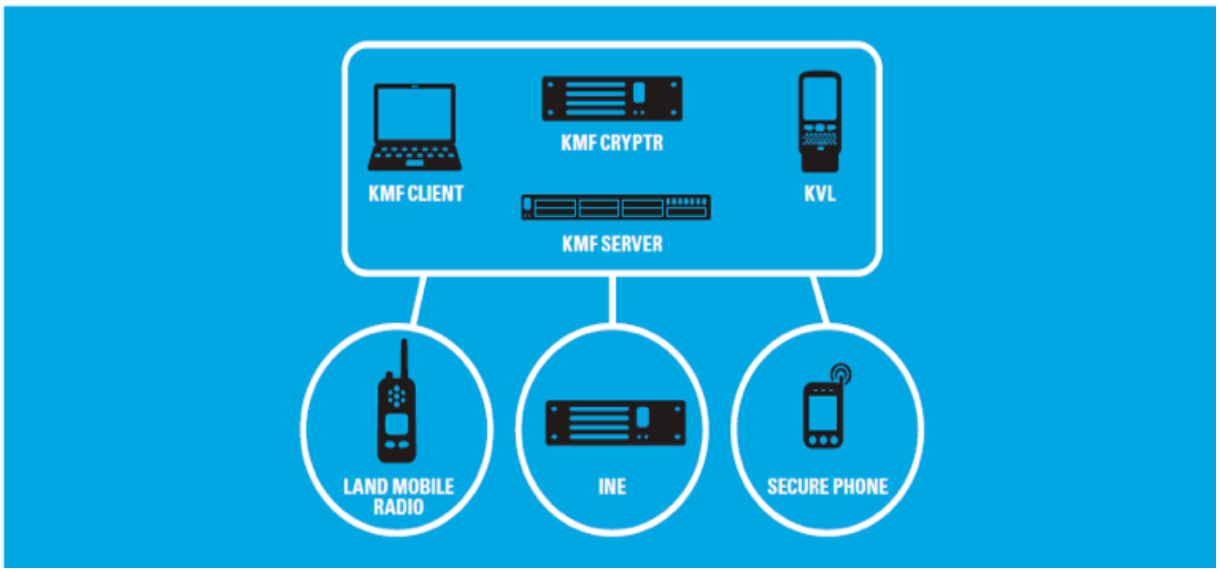
The KMF includes a FIPS 140-2 certified key material generator, freeing operators from the reliance on third party suppliers or manual key material generation. The operator can simply instruct the KMF to replenish the store of keys when the inventory drops below the necessary volume.

## KMF HELLO

KMF Hello is a quick and efficient method of determining whether a radio is within the range of the system network without introducing unnecessary voice traffic.

## KMF REDUNDANCY

The KMF Redundancy feature provides a hardware back-up for the KMF server which contains identical key material information. In the event of a necessary change-over, the redundant KMF seamlessly and automatically takes over operation of the key management responsibilities while preserving the existing KMF information and device status.



# KMF SPECIFICATIONS

### PROJECT 25 COMPLIANT FEATURES

| |
|---|
| Add, Modify, and Delete Keys |
| Zeroize |
| Change-Over |
| Rekey |
| Hello |
| Warm Start |
| AES & DES-OFB Algorithms |

### MOTOROLA SPECIFIC FEATURES

| | |
|---|---|
| KLK (Key Loss Key) Rekeying | |
| Remote Inhibit / Enable | |
| Multiple Encryption Algorithms Supported | DES-XL, DVI-XL, DVP-XL, AES, DES-OFB |

### PERFORMANCE / CAPACITY

| |
|---|
| Up to 65 Clients supported per KMF Server |
| 64,000 unit database capacity |
| Up to 64 partitions (agencies) |

### KMF CRYPTR ELECTRICAL AND PHYSICAL SPECIFICATIONS

| | |
|---|---|
| Power | 12VDC@ 300 mA |
| Dimensions | 1.5 X 5.7 X 4.7 in.<br>39 X 145 X 120 mm |
| Weight | 1.75 lbs (800g) |

### ENCRYPTION KEY LOADER SPECIFICATIONS

| | |
|---|---|
| Key Storage Capacity | 1 Master Key per algorithm |
| FIPS 140-2 Level 2 | Certificate #1831 |
| FCC CRF 47, Part 15 subpart B for class B equipment | |
| CE Certification | EN55022: 1998<br>EN55024: 1998 |

To learn more about how Motorola's Key Management Facility solution can help you streamline your radio fleet's key management, contact your Motorola representative or visit **motorolasolutions.com/KMF** for more information.

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MOTOROLA SOLUTIONS