



**STS ASSOCIATION**  
Standard Transfer Specification

# KMC BROCHURE

# WHAT IS KMC?

- ▶ The Key Management Centre is a repository for STS Supply Groups, Vending Keys, and Key Use Policies.
- ▶ Ensures unique allocation of Supply Groups. Generates, stores, and protects Vending Keys and policies
- ▶ Ensures keys are available to authorised users
- ▶ Securely distributes Vending Keys and policies to Security Modules (in Vending and Manufacturing Systems)
- ▶ The KMC is a trust anchor for security in the STS ecosystem.

## KMC FEATURES

- ▶ Supports the STS600-4-2 Key Management specification  
STS600-4-2 standardises the interface between the KMC and the HSM.
- ▶ Employs state of the art security techniques (such as AES and ECC)
- ▶ Complies with international ISO and NIST standards.
- ▶ Policy-based control of Vending Key use:
  - A policy allows a Security Module to receive and use a Vending Key, subject to limits.
  - Time limit: when the policy expires the Security Module stops using the key
  - Value limits: controls the maximum value of tokens the Security Module can generate
  - Refresh Period: force periodic recheck in case policy changes
- ▶ Replaces ageing legacy infrastructure to improve security and ensure continuity of service.



## KMC BENEFITS

- ▶ Future-proof security
- ▶ Meets or exceeds Smart Grid security requirements
- ▶ Simpler logistics & supply chain security
- ▶ Security Module shipped from manufacturer to customer; no more shipping to the KMC.
- ▶ Enhanced Key Load File and HSM devices enables TID Rollover
- ▶ Risk Management
- ▶ Key use policy enforced by SM puts key owner in control and allows risk to be controlled.
- ▶ Loss control mechanism secures income streams and shuts down ghost vending.
- ▶ Use the STSA's KMC service, or deploy your own KMC (future)
- ▶ SMs can receive keys from multiple KMCs (future)

## NEW KMC IMPACT

- ▶ Won't affect deployed STS meters
- ▶ Vending Systems must support new Key Load File and Security Module
- ▶ A Vending System must obtain a fresh KLF from the KMC periodically
- ▶ Utilities must upgrade Vending Systems and issue Rollover Key Change tokens by 2024
- ▶ Key owners must specify a Key Use Policy (rather than a coding authorisation) to the KMC.



**STSA ASSOCIATION**

Standard Transfer Specification

Simple ▶ Trusted ▶ Secure



Further information about the Standard Transfer Specification and the STS Association may be found on the Association's website [www.sts.org.za](http://www.sts.org.za) or by contacting:

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