

FUTUREX Excrypt™ SSP9000

HARDWARE SECURITY MODULE

Protect Your Sensitive Data and Transactions
with the Industry-Leading Security and
Revolutionary Functionality of the Fastest
Payment HSM in the World



A Cost-Effective Security Solution for Your Transaction Processing & Data Security Needs

- Helps lower your cost per transaction rate
- Ability to standardize your HSMs onto a single platform
- Advanced feature set prepares your organization for future regulatory changes and updates
- Integrated disaster recovery and redundancy features increases your resistance to unexpected outages while simultaneously reducing your total hardware footprint
- Comply with key management best practices by using the onboard smart card reader to reduce your reliance on paper-based key component storage

Available Models

- 250 transactions per second
- 600 transactions per second
- 1,000 transactions per second
- 2,250 transactions per second

Industry-Leading Transaction Speed and Security

We know that your ATM and POS networks need data encryption security that is capable of scaling with your organization. That is why our Excrypt™ System Security Processor (SSP) 9000 has been designed to offer complete and robust transaction security at industry-leading speeds.

The Excrypt™ SSP9000 operates at 2,250 transactions per second (TPS) and contains security features to not only meet, but exceed security requirements from organizations and standards that include ANSI, ISO, FIPS, and PCI.

Setting the Standard

Adhering to all major industry standards, the Excrypt™ SSP9000 is compliant with all audit requirements for the major switches to support not only current, but also emerging security standards. The units contain a proprietary encryption card designed to function in compliance with the most rigorous standards available, thereby giving you the robust protection you need to secure your growing network.

Additional security features have been included to ensure that your organization can comply with key management best practices. An integrated smart card reader provides a secure solution for loading key components, syslog support allows you to remotely maintain logs to monitor for unauthorized access attempts, and the Futurex Securus can be used to establish a secure connection and load keys, configure settings, and manage the device.

Hardware Features At-A-Glance

- Dual redundant power supplies with warning alarm
- Dual, redundant gigabit TCP/IP (Ethernet) ports, allowing up to 2,250 transactions per second (TPS)
- Smart card reader for secure Master File Key (MFK) component storage and loading
- Dual, unique barrel locks for protecting system configuration port

SPECIFICATIONS

Excrypt™ SSP9000

Dimensions & Weight

Height: 1U - 1.72 inches (4.37cm)
Width: 19 inches (48.26cm)
Length: 11.3 inches (28.70cm)
Weight: 26.1 lbs (11.8 kg)

Transactions Per Second

Up to 2,250 Transactions Per Second (TPS)

Meets Industry Compliance Standards

FIPS 140-2 Level 3
PCI-HSM (In Progress)
ANSI X9.24 part 1 and part 2—TR-39
Applicable future compliance mandates
RoHS
FCC Part 15 – Class B

Supported Cryptographic Functionality

Triple-DES DUKPT
Master/Session
TR-31
RSA for asymmetric remote key loading to ATMs
AKB
EMV 4.2
AES and ECC-ready

Operating Conditions

Power requirements: 100 – 230 VAC 50/60 Hz. 400 Watts
Operating temperature: 50° to 95°F (10° to 35°C)
Storage temperature: -40° to 149°F (-40° to 65°C)
Operating relative humidity: 20% to 80% non-condensing
Storage relative humidity: 5% to 95% non-condensing

External Hardware Requirements

Dedicated PC/Laptop: for configuration and key loading
or Futurex Securus: handheld touchscreen-based product for configuration and key loading

Excrypt™ SSP9000 Units Include

Excrypt™ Manager application CD
User guide
Mounting brackets
Two TRSM barrel keys
Cables

Bring comprehensive security and robust functionality to your payment processing infrastructure with Futurex's innovatively-designed Excrypt™ SSP9000.

Universal Compatibility

- Includes the Futurex Excrypt™ Universal Interface (UI), allowing customized support for command set emulation of other common HSM platforms
- Compatible with all major host application software products sold around the world
- Standardizes your HSMs across all major platforms

Cost-Effective Solutions

- Best cost to performance ratio in the industry
- Lowers your cost per transaction rate
- Excrypt™ Manager GUI reduces training and administrative costs

Excrypt™ Manager GUI

- Simple point-and-click application reduces configuration time from hours to minutes
- Perform vital key management functions directly through the GUI, such as:
 - Load keys, including Master File Keys
 - Generate random keys
 - Generate and verify key cryptograms
 - Generate and verify key blocks

Secure Configuration and Key Loading

- Integrated smart card reader allows Master File Key (MFK) components to be stored on portable TRSMs
- Securely establish a trusted mutual authentication for HSM configuration using the Futurex Securus, a handheld, touchscreen-based configuration and key loading device
- Remotely maintain logs with included syslog support

Browser-Based Administration Tool

Eliminates the need for your security administrator to be physically located at the HSM to perform functions such as:

- Upgrade device firmware
- Alter IP and COMM port settings
- Alter host software application parameters
- View trace logs of all command details

Robust Physical and Logical Security

The Excrypt™ SSP9000 is designed with the following security features:

- 1U hardened steel interlocking rack mounted case
- Two unique faceplate bezel locks to protect the configuration port
- Battery-backed Tamper Resistant Security Module (TRSM) with epoxy barrier and sensor wires to protect processor and system memory

Disaster Recovery and High-Availability Features

The Excrypt™ SSP9000 contains the following disaster recovery, redundancy, and high-availability features:

- Dual, redundant power supplies with alarm notification for disabled power supplies
- Dual gigabit Ethernet (TCP/IP) ports
- Directly interfaces with the Guardian9000, allowing for secure HSM log management, remote management of multiple devices, load balancing, and SMTP/SNMP notification of system events and warnings