

# FUTUREX Excrypt™ SSP9000 Enterprise

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



## An Added Layer of Protection That Continually Monitors & Updates Your HSM Network

- Capable of bringing total system redundancy and disaster recovery capabilities to your infrastructure
- Real time HSM network monitoring
- Advanced feature set prepares your organization for future regulatory changes and updates
- Centralized HSM management and configuration
- Comply with key management best practices by using the onboard smart card reader to reduce your reliance on paper-based key component storage
- PKI-based remote Master Key loading for Lights-Out datacenters
- Customized alerting via SMTP, SNMP, and SMS

## Security, Speed, and Scalability

In today's rapidly-changing security landscape, we know that your top priority remains to ensure the security of your sensitive data. The Excrypt™ SSP9000 Enterprise offers the secure and robust transaction processing capabilities of the Excrypt™ SSP Series along with additional load balancing, disaster recovery, and remote configuration capabilities. This highly scalable solution allows you to increase transaction processing capacity as your organization grows without increasing your total rack footprint. From monitoring and logging for audits to maintaining multiple Master Keys, the Excrypt™ SSP9000 Enterprise is your all-in-one security solution.

## Continuous HSM Monitoring and Load Balancing

One of the unique features of the Excrypt™ SSP9000 Enterprise is its ability to monitor when exhaustive PIN attacks are occurring and alert your HSM network administrator should such an attack occur. It also provides status update monitoring to ensure the continuous operation and stability of your payment processing infrastructure.

The Excrypt™ SSP9000 Enterprise conducts and logs diagnostic monitoring that observes unit temperature, error messages, and battery life. SNMP support is also included and can automatically broadcast errors to a central network monitoring tool. Additional monitoring capabilities through SMTP and SMS ensure that your network administrators are able to be reached in critical situations.

## Robust Functionality and Versatility

The Excrypt™ SSP9000 Enterprise allows you to organize multiple HSMs internally within a single rack-mountable chassis into a single functional group that operates faster and more effectively than individual HSMs do. Up to four encryption cards may be used within an individual Excrypt™ SSP9000 Enterprise, allowing for load balancing at a speed of up to 8,000 transactions per second.

Logical separation of encryption cards is also possible when using the Excrypt™ SSP9000 Enterprise, allowing organizations to use multiple Master Keys to host multiple transaction processing environments for separate purposes within a single chassis.

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## SPECIFICATIONS

# Excrypt™ SSP9000 Enterprise

### Dimensions & Weight

Space: 2U  
Weight: 36.5 lbs (16.83 kg)

### Meets Industry Compliance Standards

PCI-HSM (In Progress)  
FIPS 140-2 Level 3  
ANSI X9.24 part 1 and part 2—TR-39

### Transactions Per Second

Up to 8,000 Transactions Per Second (TPS)

### 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

Keyboard: Standard USB  
Mouse: Standard USB  
Video: SVGA1024x768 at 75Hz refresh

### Excrypt™ SSP9000 Enterprise Unit Includes

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

### Integrated Alert and Notification Formats

Simple Mail Transfer Protocol (SMTP)  
Simple Network Management Protocol (SNMP)  
Short Message Service (SMS)

### 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

### Remote Management Capabilities

Master Key loading  
User and permissions administration  
Log management and audit reporting  
Synchronization of keys and configuration details across HSMs  
Firmware distribution and installation

### Hardware Redundancy

Dual, redundant, hot-swappable power supplies  
Failover link with additional Excrypt™ SSP9000 Enterprise units using the Guardian9000

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

### Ease of Use

- Single-point encryption key loading
- Robust and versatile GUI makes configuration simplified and easy to understand
- Compatible with all major host application software products sold around the world

### Reporting & Alert Updates

- Remotely pull data logs for internal and external audits
- Generate detailed diagnostic and support reports
- Simple Mail Transport Protocol (SMTP) and Short Message Service (SMS) allow you to be notified by email or mobile phone should any technical issues with the Excrypt™ SSP9000 Enterprise arise
- Simple Network Message Protocol (SNMP) automatically transmits error messages to a central network monitoring tool

### Disaster Recovery

- Automatically synchronizes keys and device information across HSMs
- Avoids loss of functioning in the event of a disaster or device failure
- Communicates with other Excrypt™ SSP9000 Enterprise units using the Guardian9000, allowing organizations to establish system-wide redundancy

### Load Balancing

- In the slim chance that one encryption card in your HSM group should fail, the Excrypt™ SSP9000 Enterprise will help the other functioning encryption cards take the load off the impaired unit

### Scalability

- Add transaction processing capacity as your organization grows in transaction volume
- The Excrypt™ SSP9000 Enterprise is capable of processing transactions at up to 8,000 Transactions Per Second (TPS) from within a single rack-mountable chassis
- Helps increase the overall functionality of your HSM network

### Single-Point Key Loading and Device Configuration

The Excrypt™ SSP9000 Enterprise allows organizations to establish a true Lights-Out environment for payment processing:

- Establishes a Public Key Infrastructure (PKI) to securely and remotely load Master Keys
- Replicate device configuration details across multiple units, reducing initial setup time

### Logical Separation of Encryption Cards

The Excrypt™ SSP9000 Enterprise allows for encryption cards to be logically separated, allowing for numerous benefits:

- Use multiple Master Keys for multiple purposes
- Process transactions for environments requiring isolation within a single hardware platform

### Advanced Hardware Features

The Excrypt™ SSP9000 Enterprise includes numerous advanced hardware features, including:

- Integrated smart card and CompactFlash readers
- Advanced cryptographic hardware based on Futurex's EXP9000 encryption card
- Dual, redundant, hot-swappable power supplies