

Hifn Sypher™ Encryption Appliances

Encryption Made Easy for Tape Backup Environments



Protect from Accidental or Deliberate Loss of Data

Tape portability is a huge security challenge if unencrypted backup tapes fall into the wrong hands. The Hifn Sypher Encryption Appliances allows you to easily and securely encrypt tapes with maximum performance.

Secure Sensitive Information on Tape with Strong Encryption

Hifn Sypher Encryption Appliances provide everything you need to comply with regulatory requirements including the Data Accountability Act, California SB 1386, the Identity Theft Protection Act and the Personal Data Privacy and Security Act.

- AES 256-bit encryption
- ANSI x9.17 random number generation
- In-line appliance ensures strong encryption with maximum performance

Simple and Secure Automated Key Management

Encryption key management is simple, transparent and secure with Hifn's Sypher appliance. Key management must be safe to ensure that keys are not lost, it must be secure to ensure that keys cannot fall into the wrong hands and it must be transparent and easy to use so that encryption is not a burden on operations staff. Hifn's key management system fulfills all of these goals.

Central Key Manager

The Hifn Sypher Central Key Manager can perform centralized key management and backup with fault tolerant active/active mirroring for enhanced key safety and security. A single Central Key Manager can serve any number of Sypher and Swarm storage appliances.

Superior to Software Encryption

Most tape backup vendors supply encryption with their software. Unfortunately this feature greatly reduces performance and eliminates the opportunity to compress the data on tape to save media costs. Hifn Sypher appliances compress the data before encryption which yields stronger encryption and prevents any expansion of the volume size.

- * No performance or size penalty for turning on encryption

Easy to Deploy and Manage

Hifn Sypher Encryption Appliances integrate seamlessly with servers, tape drives, tape libraries and backup software.

- Easy to install
- Centralized graphical administration for all appliances
- No manual processing or additional scripts

HIGHLIGHTS

- AES 256-bit encryption for removable tape
- Enables your library to exist in an IP SAN environment
- In-line appliance improves backup performance
- Transparent, automatic and comprehensive key management
- Cost-effective iSCSI SAN connectivity
- Hardware accelerated data compression to reduce media costs
- SCSI or optional fibre channel support for tape drive or library connectivity
- Simple integration with existing backup software and tape environments
- One Sypher can serve multiple tape drives
- Compatible with all tape backup software: Backup Exec, CommVault, NetBackup, NetWorker, Retrospect, and others

Hifn Sypher Features

| | Sypher 3000 | Central Key Manager |
|---------------------------------------|---|---|
| Rack space required | 1U | 2U |
| Multiple drive support | | |
| LTO-4, LTO-3, DLT-S4 | 1 | N/A |
| LTO-2 | 2 | N/A |
| LTO-1, DAT, DLT | 4 | N/A |
| RAID level (standard) | N/A | 51 (mirrored) |
| Number of disk drives | 0 | 8 |
| Raw/usable (mirrored) capacity | | |
| 250 GB hot swap SATA II drives | N/A | 2 TB / (750 GB) |
| 500 GB hot swap SATA II drives | N/A | 4 TB / (1.5 TB) |
| Hot swap power supplies | N/A | 4 |
| Host interfaces | 2 x GbE iSCSI | 4 x GbE iSCSI |
| Backup port | Standard: U320 SCSI Optional: 2G Fibre | Standard: U320 SCSI Optional: 2G Fibre |
| Failover level | N/A | Active/Active |



Hifn Sypher Specifications

| | | |
|----------------------------------|--|--|
| Dimensions | H: 1.7" (43mm), W: 16.7" (424mm), D: 26.8" (681mm) | H: 3.4" (86mm), W: 16.7" (424mm), D: 26.8" (681mm) |
| Gross Weight | 46 lbs (20.9 kg) | 92 lbs (41.8 kg) |
| Operating Temperature | 10° – 35°C (50° – 95° F) | 10° – 35°C (50° – 95° F) |
| Non-Operating Temperature | -40° – 70°C (-40° – 158° F) | -40° – 70°C (-40° – 158° F) |
| Operating Humidity Range | 8 – 90% non-condensing | 8 – 90% non-condensing |
| Non-Operating Humidity | 5 – 95% non-condensing | 5 – 95% non-condensing |
| Power requirement | 560W Dual-Redundant AC power supply 100 – 240VAC, 50-60Hz, 10 Amps | 2 x 560W Dual-Redundant AC power supply 100 – 240VAC, 50-60Hz, 10 Amps |
| Regulatory compliance | USA – UL listed, FCC Canada – CUL listed Germany – TUV Certified Europe/CE Mark EN 60950/IEC 60950 Compliant | USA – UL listed, FCC Canada – CUL listed Germany – TUV Certified Europe/CE Mark EN 60950/IEC 60950 Compliant |



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