

## TapeSentry® f2

### Highlights

- Interoperable, flexible and scalable
- High performance
- Complete data security
- Centralized key management
- Cost efficient
- Best price-performance



**TapeSentry f2**

### Overview

TapeSentry® delivers maximum security to stored data on tape media. As a high-performance, standalone, enterprise-class appliance, TapeSentry provides front side compression and robust encryption at wire-level speed, with zero impact on the network, server or existing backup infrastructure. TapeSentry provides an industry standard encryption algorithm, crypto-signed logging and centralized key management to satisfy regulatory requirements and protect stored data from unauthorized data access, theft, accidental misplacement or loss.

### Key Features & Benefits

#### *High Performance*

TapeSentry delivers wire-speed performance across multiple drives, adding no system overhead, complexity or latency within the backup window, servers or storage devices. By managing data at the network layer, TapeSentry facilitates a smooth data flow, which improves the total performance and throughput of backup environments. TapeSentry manages data flow to drives, minimizing media damage and performance issues caused by slow streaming rates.

#### *Centralized Key Management*

TapeSentry supports all phases of the key life cycle, ranging from key generation, distribution and sharing, to storage, backup and recovery. Built with an open architecture, TapeSentry can seamlessly integrate with any third party key management systems. TapeSentry provides unprecedented security and easy-of-use for a one-step disaster recovery solution with secure sharing of data and keys across business partners and authorized locations.

#### *Complete Data Security*

TapeSentry delivers maximum data security at the appliance, network and data level. Complete administrator authentication and authorization guard against any unlawful access to the box. This is coupled with Crossroads' patented Access Controls, a powerful resource sharing feature that controls access to storage targets from multiple hosts to the Logical Unit (LUN) level. Finally the valuable data itself is protected by an industry-standard, robust AES-256 encryption algorithm. Other notable features include digitally signed audit logs, configurable security policies and role-based access controls.

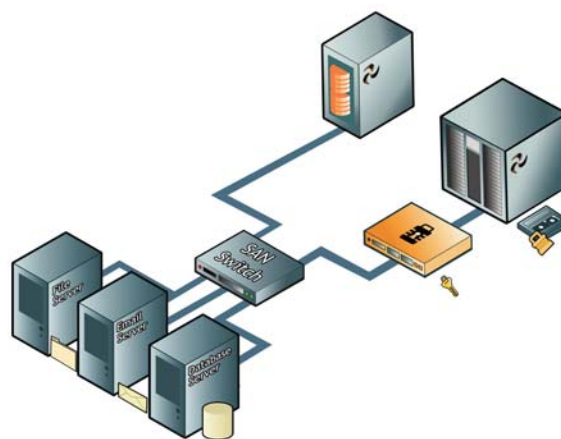
#### *Industry-Leading Interoperability*

TapeSentry leverages Crossroads leading position of SAN interoperability in the market to provide full support for mid-range and open system servers, network infrastructures, tape devices and libraries. TapeSentry works seamlessly with existing backup applications, and as an easy, plug and play appliance, it effortlessly integrates into a heterogeneous tape and network environment.

# Specifications

| Fibre Channel Ports                                             | TapeSentry f2                      |
|-----------------------------------------------------------------|------------------------------------|
| Number of FC Ports                                              | 2                                  |
| Port Speed                                                      | 4 Gb/s (auto-negotiates to 2 Gb/s) |
| Performance Features                                            |                                    |
| Multi-streaming of LTO 3 drives per appliance                   | Yes                                |
| Configurable Buffered Tape Writes                               | Up to 10 buffers                   |
| Inquiry Caching                                                 | Yes                                |
| Physical Features                                               |                                    |
| Rack mountable                                                  | Yes                                |
| Form factor                                                     | 3U                                 |
| Redundant hot-swap power supplies                               | Yes                                |
| N+1 fans                                                        | Yes                                |
| Key lock and intrusion detection                                | No                                 |
| Front LEDs for network and power activity                       | Yes                                |
| Firmware Features                                               |                                    |
| FC Tape Error Recovery                                          | Yes                                |
| Key Management                                                  |                                    |
| Centralized key management system                               | Yes                                |
| Secure key life-cycle management                                | Yes                                |
| Random key generation                                           | Yes                                |
| Scalable key servers and databases                              | Yes                                |
| Separation of encrypted data from key storage                   | Yes                                |
| Redundant and fault tolerant configurations                     | Yes                                |
| Security Features                                               |                                    |
| Access Controls                                                 | Yes                                |
| User Defined Maps                                               | 8                                  |
| Dynamic Mapping                                                 | Yes                                |
| Auto-Assigned / Indexed Maps                                    | 2                                  |
| Active Initiators Supported                                     | 250                                |
| Open authentication architecture for controlling access to keys | Yes                                |

| Management Features                                                        | TapeSentry f2                                        |
|----------------------------------------------------------------------------|------------------------------------------------------|
| Web GUI and CLI                                                            | Yes                                                  |
| Secure SSL/SSH user access                                                 | Yes                                                  |
| Role-based users and access                                                | Yes                                                  |
| Interface for appliance configuration, administration, backup and recovery | Yes                                                  |
| Cryptographically signed audit log of key events                           | Yes                                                  |
| Operating Environment                                                      |                                                      |
| Operating Temperature                                                      | +10° C to +35° C                                     |
| Operating Humidity (non-condensing)                                        | 8 to 90%                                             |
| Regulatory Compliance                                                      |                                                      |
| Safety                                                                     | UL 60950, cUL 60950, IEC60950, CSA C22.2 No. 60950-1 |
| Emissions                                                                  | FCC part 15 Class A                                  |
| CE Marking                                                                 | EN55022, EN55024, EN61000-3-2, EN/IEC61000-3-3       |
| Environmental                                                              | RoHS                                                 |



## TapeSentry f2 Architecture

TapeSentry eases the security challenges inherent in tape, offering router-based, cost-effective high performance tape encryption with heterogeneous interoperability.



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## ABOUT CROSSROADS

Headquartered in Austin, Texas, Crossroads Systems delivers flexible solutions to connect, protect, secure and restore business-critical "data-at-rest." Crossroads (symbol: CRDS) is currently traded on Pink Sheets and also posts its financial disclosure reports, press releases and other related documentation on the OTCIQ web service of the Pink Sheets website. For more information, please visit [www.crossroads.com](http://www.crossroads.com).



Crossroads promotes institutional and personal environmental responsibility within the company, with our partners and with the users of our products. We are committed to providing the best products and services while encouraging practices consistent with sustainable living and resource conservation.

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