



KEY FEATURES

FC Extension Gateway

Cost Reduction Plus High Availability

The i-8100B implements a trunking mechanism, which allows using a single WAN connection for extending up to seven parallel FC fabrics. Two FC fabrics separated by thousands of kilometers can be merged over low cost Internet connections to operate as a single fabric. When multiple FCIP interfaces are installed, each FC input can be directed through a separate WAN interface, providing optimal data traffic distribution. If one WAN connection fails, traffic is automatically redistributed through the remaining healthy connections, providing complete recovery on the gateway rather than on the FC fabric level.

Interoperability

The i-8100B is fully compliant with FC standards and provides basic services for native modes of FC switches of major vendors. A single pair of i-8100B gateways can support interconnection of parallel FC fabrics containing switches from multiple vendors in different configurations.

Multi-Service Connectivity

Because the i-8100B provides tunneling of ULP (Upper Layer Protocol) independent L2 Ethernet traffic as well as Fibre Channel through the same WAN infrastructure, the gateway can easily be customized to meet particular application needs. Multiple configurations of Fibre Channel, GbE L2 and FCIP ports are possible in a single box.

Engineered for Long Distance

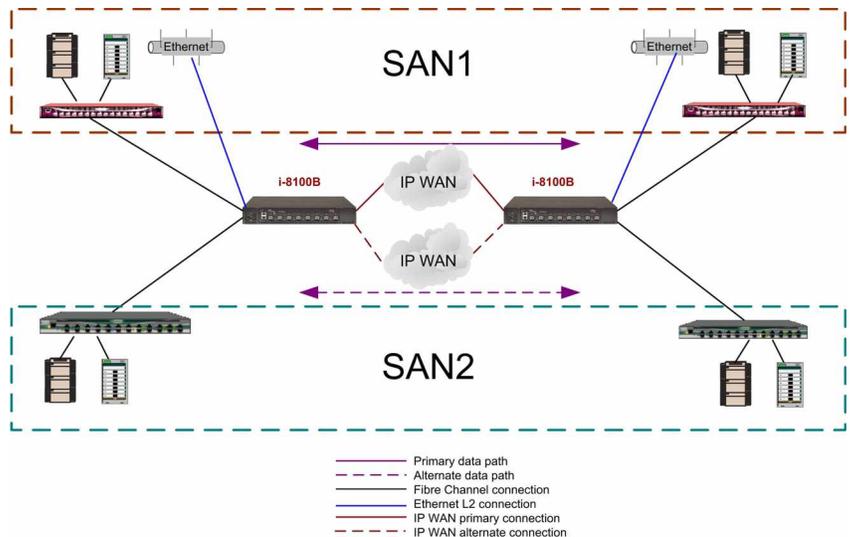
The i-8100B is connected to the WAN over industry standard Gigabit Ethernet 1000BaseFX interfaces with software configurable speed. The Congestion Avoidance mechanism implemented on the IP extension interfaces maintains maximum performance in shared or low bandwidth IP WAN environments.

On the FCIP side, the i-8100B implements a connection-oriented, frame-based protocol that moves FC and L2 Ethernet over IP for distances of thousands of kilometers without performance degradation, and with data and order delivery guaranteed. Any frame loss or corruption is completely recovered by the i-8100B rather than by FC devices.

OVERVIEW

With the ever-increasing need to safeguard data, many companies are looking for a reliable method of connecting their storage area networks (SANs) across the WAN. For applications that are well suited to routed IP networks, LightSand's i-8100B transports Fibre Channel and protocol-independent Layer 2 Ethernet metadata (SNA, Novell, VMS SCS and other) across a wide area ranging from campus to continental level.

The i-8100B is especially suited for use in a data center infrastructure. Combining unique support for a multi-site environment with the ability to tunnel data from multiple FC fabrics and Ethernet LANs over the same WAN, the i-8100B is an indispensable part of a flexible data center solution. By using industry standard networking protocols, the i-8100B is easily integrated into existing IP environments, or interconnected over dark fiber and metropolitan CWDM or DWDM. The i-8100B's multiple FCIP extension links increase throughput while maintaining redundancy protection for remote applications.



APPLICATIONS

The i-8100B provides transparent bridging services for SANs over IP (FCIP) networks for a variety of applications including data replication and migration, disaster recovery, remote access, business continuity and asset management.

Data Protection

- Synchronous and asynchronous mirroring
- Remote tape vaulting

Storage Consolidation

- Centralized tape backup
- Data migration

IT Cost Reduction

- Extended use of remote equipment
- Reduction of storage through consolidation

High Availability Access to Data

- Distributed clustering applications

SPECIFICATIONS

SYSTEM ARCHITECTURE

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|----------------------------------|---------------------------------------------------------------------|
| Gateway Architecture..... | 8 ports, wire-speed, unblocked, aggregate bandwidth - 16 Gbit/sec |
| SAN Ports | 4 to 7 ports |
| SAN Port Media..... | Fibre Channel, 1.0625 Gb/s, SFP, multi-mode (850nm), as a standard |
| FC Standards..... | FC-PH-2, FC-MI, FC-PH, FC-FS, FC-BB, FC-BB-2, FC-SW-2 |
| FC Port Type..... | B_port |
| FC CoS | Class 2, Class 3, Class F |
| B2B Credits | Up to 16 |
| L2 Tunneling Ports..... | 1 to 3 ports (pre-configured) |
| L2 Port Media | Gigabit Ethernet, 1.25 Gb/s, SFP, multi-mode (850nm), as a standard |
| WAN Ports | 1 - 4 ports (pre-configured) |
| WAN Port Media | Gigabit Ethernet, 1.25 Gb/s, SFP, multi-mode (850nm), as a standard |
| Gigabit Ethernet Standards | 802.3z |
| Encapsulation..... | FC over IP (FCIP) |
| Extension Distance..... | 6000 km at Full Wire-Speed |

SPECIAL FEATURES SET

| | |
|---------------------------|---------------------------------------------------------------------|
| Redundancy | WAN port fail-over, box level redundancy |
| Compression | Over IP, maximum ratio 1:21 |
| Bandwidth Management..... | Manual rate limitation; Rate auto-adjustment (congestion avoidance) |

MANAGEMENT

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|-------------------------|----------------------------------------------------------------------------------------------------|
| Supported Software..... | SANman™ (GUI); Telnet, SNMP; MIB-II, Fiber Alliance MIB, RMON MIB, RFC 2837, configurable traps |
| Management Access..... | 10/100BaseT Ethernet (RJ-45); Serial port; |
| Diagnostics | BIST (built-in self test); Local Spin Test; Remote Spin Test; Bandwidth Probing |

MECHANICAL SPECIFICATIONS

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|--------------------|--------------------------------------------|
| Dimensions | Width: 17.4" x Depth: 17.9" x Height: 2.6" |
| Weight | 22.9 pounds (10.4 kg) |
| Rack Mounting..... | 19" rack |
| Cooling | Front to back (fans FRU, hot swap) |

POWER SPECIFICATIONS

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|------------------------------------|-----------------------------|
| Dual Power Supply (optional) | FRU (hot swap) |
| Supported Power..... | Nominal: 320mA at 220-240V; |
| Frequency | 50/60 Hz |
| Power Consumption | 75 Watts (maximum) |

ENVIRONMENT AND REGULATIONS

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|------------------|-----------------------------------------------------------------|
| Temperature..... | 0°C to 40°C (32°F to 104°F) |
| Humidity..... | 5% to 85% non-condensing |
| Regulatory | UL Listed, FCC Class A product, complies with Canadian ICES-003 |



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