



i8100A-SMB

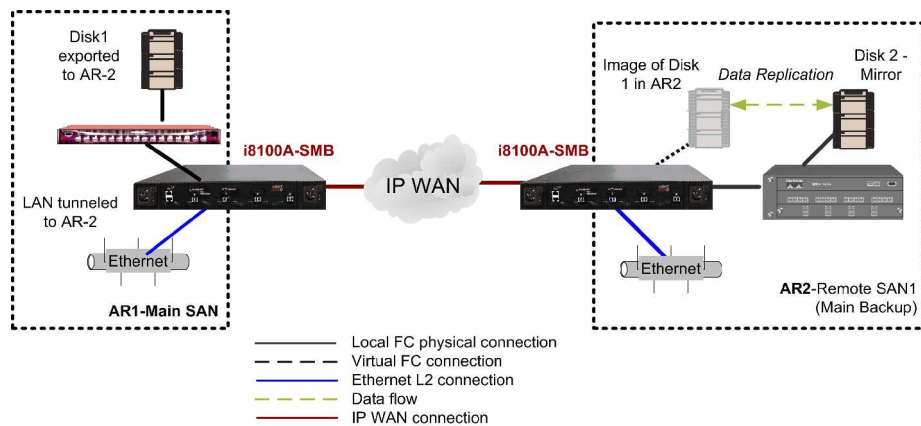
KEY FEATURES:

- **Inter-Fabric-Routing Gateway**
- **Interoperability**
The E-port of i8100A-SMB is fully compliant with FC standards and provides basic services for native modes of major FC switch vendors.
- **SAN Isolation**
The ability of i8100A-SMB to limit address space on the boundary of local FC fabric in conjunction with ability to terminate FC services provides required isolation. As a result i8100A-SMB is fully non-transparent for any disruption, which occurs in the local FC fabric allowing to interconnect switches of different vendors in different versions which normally could not join the same fabric.
- **Additional Security for SAN Fabrics**
Brings new levels of SAN security by using LightSand's export/import firewall-like mechanism in conjunction with conventional Zoning.
- **Designed for Distance**
On the FCIP side i8100A-SMB implements a connection-oriented, frame-based reliable protocol that moves FC and L2 over IP for distances of thousands of kilometers without performance degradation, and with data and order delivery guaranteed. Software adjustable speed and Congestion Avoidance mechanism allow maintaining maximal possible performance in shared or low bandwidth IP WAN environments.
- **Compression**
Implemented for more effective utilization of low bandwidth or provisioned bandwidth connections. It allows transferring more data while keeping the low price of the extension circuit.

OVERVIEW

With the ever-increasing need to safeguard data, many companies are looking for methods to interconnect their disparate and geographically distributed SAN (storage area networks) across the WAN. For applications that are well suited to the use of routed IP connections, LightSand has developed the i8100A-SMB, a SAN extension over routed IP networks gateway. This sophisticated gateway provides local switching, SAN-to-SAN isolation (routing between FC fabrics) and Gigabit Ethernet extension tunnel, for connection between remote sites. The i8100A-SMB brings ultimate isolation, security and wide area connectivity to FC storage networks.

When remote SANs merged by using a traditional connection over the WAN, FC fabrics will form a single large fabric operating over the distance. This approach, which could be fine in small local environment, can lead to scalability and management problems when several sites (especially remote) with greater number of FC switches participate in the fabric. The LightSand's i8100A-SMB creates the level of virtualization to SAN, which allows multiple SAN islands to be interconnected without merging fabrics. Any or all of the storage devices may be shared from one site to another but the FC fabrics will operate independently. The i8100A-SMB enables this functionality even when the FC fabrics are based on switches of different vendors, which normally wouldn't join the fabric, "making them" interoperable.



Applications

i8100A-SMB SAN extension gateway over MAN and WAN is designed for a wide variety of applications with the main accent on storage consolidation, business continuance and disaster recovery.

Data Protection

- Synchronous and asynchronous mirroring
- Remote tape vaulting and backup

SAN Integration

- Interconnection or consolidation
- Integration of multi-vendor remote fabrics

SPECIFICATIONS:

SYSTEM ARCHITECTURE:

Gateway Architecture	4 ports, wire-speed, unblocked, aggregate bandwidth - 8 Gbit/sec
SAN Ports.....	2 Fibre Channel ports
SAN Port Media	Fibre Channel, 1.0625 Gb/s, SFP (multi-mode (850nm), as a standard)
FC Standards	FC-PH-2, FC-SW-2, FC-GS-3, FC-MI, FC-PH, FC-GS2, FC-FS
FC Port Type	E_port, F_port
FC CoS	Class 2, Class 3, Class F
B2B Credits	Up to 16
L2 Tunneling Ports	1 Port
L2 Port Media.....	Gigabit Ethernet, 1.25 Gb/s, SFP (multi-mode (850nm), as a standard)
WAN Ports	1 port
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	3,000km

SPECIAL FEATURES

Bandwidth management.....	Manual rate adjustments; Auto-adjustment Rate (congestion avoidance)
FC Inter-Fabric Services	AR/DAT, FC Firewall, Static address assignment
Compression.....	Over IP, maximum ratio 1:21

MANAGEMENT

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

Dimensions.....	Width: 17.4" x Depth: 17.9" x Height: 2.6" - 1.5u
Weight.....	22.9 pounds (10.4 kg)
Rack Mounting	19" rack
Cooling.....	Front to back (fans FRU, hot swap)

POWER SPECIFICATIONS

Dual Power Supply (optional)	FRU (hot swap)
Supported Power.....	Nominal: 320mA at 220-240V; Nominal: 640mA at 110-115V (auto select)
Frequency	50/60 Hz
Power Consumption.....	75 Watts (maximum)

ENVIRONMENT AND REGULATIONS

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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