



IPS 3300 Multi-Protocol IP Storage Switch



The IPS 3300 offers:

Unbeatable Flexibility

- Blended Fabric™: FC, GE, iSCSI and iFCP connectivity on demand
- Support for full fabric, private and public loop FC devices

Lower Cost of Ownership

- Compression to lower WAN bandwidth costs
- E_Port for integration into existing FC fabrics

Scalability and Interoperability

- SAN routing to build large, stable FC fabrics
- Integration of multi-vendor FC fabrics

Superior Functionality

- Fast Write™ for maximizing throughput across long distances
- Quality of Service (QoS): Bandwidth Management

FLEXIBLE AND SCALABLE MULTI-PROTOCOL CONNECTIVITY

The IPS 3300 Multi-protocol Switch is part of McDATA's family of open storage networking products that use standards-based IP, Gigabit Ethernet (GE) and Fibre Channel (FC) for wire-speed storage fabric connectivity.

With support for standard protocols such as iSCSI, iFCP and E_Port, the IPS 3300 can connect to IP backbones, Fibre Channel (FC) fabrics and a wide variety of end systems, including Fibre Channel, NAS, and iSCSI initiators and targets. Flexible, user-configurable interface types allow the IPS 3300 to be deployed for multiple, concurrent applications, including Disaster Recovery, iSCSI access to FC storage and SAN routing.

Disaster recovery backup sites can be geographically dispersed without distance limitations, thanks to McDATA's patent-pending FastWrite™ technology, which can sustain wire-speed throughput in spite of the high link latency. The same ports on the IPS 3300 can also concurrently support iSCSI access to FC storage for customers looking to connect remote servers into the data center. iSCSI is a cost-effective solution that leverages the existing IP backbone. McDATA's iSCSI solutions have been demonstrated to be the best performing solutions in the industry. SAN routing enables customers to build very large, stable FC fabrics where by faults in one area of the network do not impact traffic in other area of the storage network.

The highly reliable and manageable multi-protocol storage fabric extends seamlessly from the data center to the metro area and beyond. McDATA's products are fully compatible with the millions of IP-based LAN, MAN, and WAN routers and switches already installed and mastered by IT professionals.

McDATA's multi-protocol switches are qualified with all major storage platforms, including EMC, HDS, HP, IBM, XIOTech, Sun, StorageTek and LSI Logic.



IPS 3300 Multi-Protocol IP Storage Switch



Model Descriptions

IPS 3300: GE/FC IP storage switch with GE and FC switching support for eight MultiService ports. FC ports configurable to 1Gb data rate. Out of band 10/100 Ethernet and serial management ports. Two intelligent ports provide TCP/IP support for connecting to IP campus or WAN backbones.

Protocol Support

Ethernet: Full duplex IEEE 802.3 Gigabit Ethernet standard on each port (1,000 Mbps each direction); 802.3x symmetric flow control; 802.1Q VLAN support; 802.3ad active failover within link-aggregated trunks; Spanning Tree Protocol (STP)

Internet Protocol (IP): TCP, UDP

Fibre Channel: FC-AL, FC-AL-2, FC-FLA, FC-GS-2, FC-GS-3, FC-FG, FC-PH, FC-PH-2, FC-PH-3, FC-PLDA, FC-SW, FC-SW-2, FCP, and E_Port

IP Storage: iSCSI, iFCP, iSNS

QoS: 802.1p Marking, Rate Limiting, Bandwidth Management

Performance: Wire-rate performance on all ports; exclusive Fast Write technology for improved write performance over long distances; support for jumbo frames; compression

Physical Media

MultiService Interfaces use GBIC modules. Modules are available for both FC and GE which support multi-mode fiber (MMF), single-mode fiber (SMF), and copper cables.

1000Base-SX: 550m over MMF
 1000Base-LX: 10Km over SMF
 100-M5-SN-I: 550m over MMF (1Gb FC)
 100-SM-LL-L: 10Km over SMF (1Gb FC)
 100-TW-EL-S: 33m over shielded twisted-pair (1Gb FC)

LED Indicators

CPU heartbeat, GE/FC link, port activity, port fault, 10/100 Ethernet management port

Management

SANvergence® Manager Centralized Java-based Graphical User Interface (GUI) for network-wide management such as zoning, E_Port configuration, iSCSI LUN virtualization, and device discovery for all SANs in the enterprise.

Element Manager™ Web-based Java applet for configuring, monitoring and troubleshooting individual IPS switches

Management Interface: In-band management through GE ports
 Out-of-band 10/100 Ethernet management port
 Standard SNMP
 Fibre Alliance MIB v3.0, MIB-II, RMON groups 1 (statistics), 2 (history), 3 (alarms), and 9 (events), McDATA MIBs
 Full Command Line Interface (CLI) via Telnet and/or console port

Internet Storage Name Service (iSNS)

Directory Services for storage devices
 Interoperates with existing Fibre Channel SNS
 SNMP Support

Power Requirements

U.S./Japan: nominal 100/120 VAC, 50 to 60 Hz
 Europe/Australia: nominal 220/240 VAC, 50 to 60 Hz

Power Consumption

Dual redundant power supplies and fans, each with maximum power consumption of 250 watts

Environmental Requirements

Temperature: 41° to 104° F (5° to 40°C)
 Humidity: 20% to 85% non-condensing

Size and Weight

Height: 3.47 in (88.1 mm)
 Width: 17.0 in (431.8 mm)
 Depth: 22.58 in (572.7 mm)
 Weight: 35 lb (15.9 Kg)

Regulatory Compliance

Meets safety and emissions requirements
 CE, FCC, GS, TUV, UL, VCCI

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