

Sun™ GigaSwift Ethernet UTP and MMF Adapters



Enterprise Class Networking

Key Highlights

- 10/100/1000 Mbps support
- Fully compliant with IEEE 802.3 standards
- Supports Cat 5 UTP unshielded twisted pair copper or MMF fiber media
- Support for Jumbo Frames
- Enjoy high-bandwidth services like voice, video, and data at an affordable cost
- Increased bandwidth provides efficient, high-speed backups of large data files
- Create an end-to-end, Gigabit Ethernet pipe to move large files for usage and backup
- Support for Sun Trunking™ 1.3 software

Now your Sun systems can take full advantage of the latest generation Sun GigaSwift Ethernet technology with network interface cards designed for copper or fiber network applications.

Sun™ GigaSwift Ethernet Adapters deliver high-performance connectivity to your Sun servers and workstations. Utilizing a single port, these adapters provide high bandwidth, server-to-server or server-to-switch connections, through copper or fiber, at Gigabit per second speed.

By reducing CPU processing loads with packet parsing, hardware check sum generation and interrupt coalescing, server efficiency is increased, alleviating network congestion on the corporate computer backbone and enhancing compute performance. Because Sun GigaSwift Ethernet Adapters comply with IEEE 802.3 standards, existing infrastructure, applications, and expertise can be retained when upgrading portions of the network to GigaSwift Ethernet technology. This interoperability protects your investment while helping to enable a smooth migration and lower total cost of ownership. Developed by Sun, these adapters offer a high level of functionality and reliability.



Sun GigaSwift Ethernet adapter

Sun™ GigaSwift Ethernet UTP and MMF Adapters Features and Benefits

Key Features

- 1000BASE-T/1000BASE-SX Gigabit performance
- Fully compliant with IEEE 802.3 standards:
 - Compliance with industry standards increases network reliability and cost savings through support for Quality of Service for mission-critical traffic service
- Support for IEEE 802.1Q VLAN:
 - Allows users on different networks to work as though they're located on the same VLAN
 - Support for IEEE 802.1P/802.1D Priority Tagging and QoS
- Sun-developed high-performance ASIC
- Support for Sun Trunking 1.3 software:
 - Increases bandwidth allowing higher aggregated data rates than any single Gigabit Ethernet link
 - Enhanced availability with load balancing and failover capabilities
- RAS functionality provides high availability and increases network uptime:
 - Support for dynamic reconfiguration (DR)
 - Support for redundancy and failover configurations
- Support for Jumbo Frames (9K bytes):
 - Reduce overhead of large file transfers by enabling larger packet size (up to 9216 bytes) instead of standard Ethernet packet size (up to 1522 bytes)
 - Supported on Solaris™ 8 and 9
- Server efficiency increased with hardware assist for:
 - TCP checksum generation and checking
 - Packet parsing and interrupt coalescing
- Full and half duplex modes:
 - Sun developed high-performance ASIC provides full and half duplex and link rate transmissions resulting in optimal bus transfers
 - Ethernet Flow Control

Benefits

- Increased productivity and cost savings through high network throughput
- Low cost of ownership and investment protection through open system and interoperability
- Increased network security and cost savings through departmental network segmentation to relieve network congestion
- Increased network reliability and cost savings through support for Quality of Service for mission-critical traffic service
- Sun quality and performance

Specifications

- ### PCI Bus
- Compliant with PCI 2.2 spec:
 - 32/64 bit, 33/66 MHz
 - Single slot universal
 - 5V or 3.3V DC
 - Half length PCI card
 - Dimensions 17.5 cm x 10.6 cm (6.9 in.x 4.2 in.)
- ### Operating Systems Supported
- Solaris 2.6, 7, 8 and 9 operating systems
- ### Standards Compliance
- IEEE 802.3 u, x, z, ab, ac compliant
 - IEEE 802.1Q VLAN (Solaris 8 or later)
 - IEEE 802.1P and 802.1D Priority Tagging and Quality of Service
- ### Environmental
- Operating temperature 0° C to 55° C
 - Storage temperature -40° C to 85° C
 - Relative humidity 0% to 95%, non-condensing
 - Shock and vibration:
 - Operating shock: 2.5 G, 11 msec., 1/2 sine
 - Non-operating shock: 18 G, 11 msec., 1/2 sine, 4 face
 - Operating vibration: 0.25 G, 5 to 500 Hz
 - Non-operating vibration: 0.6 G, 5 to 500 Hz
- ### Power Consumption
- Typical 12 Watts (2.4A at 5V)
 - Max 15 Watts (3.0A at 5V)

Sun GigaSwift Ethernet UTP Adapter

- ### Network Connection
- RJ-45 UTP connector for Cat 5 copper cabling 4-pair
- ### Operating Distance
- Using Cat 5 copper cabling 4-pair: Up to 100 meters

Sun GigaSwift Ethernet MMF Adapter

- ### Network Connection
- SC fiber connector for 50 or 62.5 micron fiber
- ### Operating Distance
- Using 1000BASE-SX Multimode Fiber:
- | Diameter (microns) | Modal Bandwidth (MHz/km) | Maximum Range (meters) |
|--------------------|--------------------------|------------------------|
| 62.5 | 160 | 220 |
| 62.5 | 200 | 275 |
| 50 | 400 | 500 |
| 50 | 500 | 550 |