

## PCI Express 10 Gigabit Ethernet Fiber Network Card w/ Open SFP+ - PCIe x4 10Gb NIC SFP+ Adapter

StarTech ID: PEX10000SFP



The PEX10000SFP 10 Gigabit Fiber Network Card is a cost-effective solution that delivers fast and reliable 10 Gbps network access at longer distances than copper-based networks. Using the SFP+ transceiver of your choice, you can connect your PCI Express-based server or workstation directly to your 10G fiber optic network.

### Faster Networking Speed

With the rising strain on network resources due to large file transfers, multimedia content, and an increase in network users, more bandwidth is often required at various levels of your networking infrastructure. With up to 10 Gbps bandwidth, this fiber NIC lets you transfer more data at faster speeds, and is an ideal low-cost addition to your server or high-powered workstation.

### Greater Flexibility & Distance

The PEX10000SFP adapts to your network fiber connection and distance requirements to offer flexible configuration via an open SFP+ slot, and is compatible with most [10GbE SFP+ transceivers](#). With broad SFP+ compatibility this cost-effective fiber card lets you use your preferred SFP+ module, giving you more options to connect your computer directly to a fiber network at greater distances.

### Superior Power Efficiency

For improved operating efficiency, the PEX10000SFP features an energy-efficient Tehuti TN4010 chipset that offers significantly reduced power consumption versus most comparable cards, including the Intel® 82599 chipset cards. Superior power efficiency also helps minimize heat generated by the card, in turn avoiding an increase in the operating temperature within your server case.

### Power Consumption Benchmark

| Chipset | Power Consumption | Speed |
|---------|-------------------|-------|
|---------|-------------------|-------|

*Approximately 40% less power consumption compared to the Intel 82599 chipset*

|                             |       |           |
|-----------------------------|-------|-----------|
| Tehuti TN4010 - PEX10000SFP | <2.0W | @ 10 Gbps |
| Intel 82599                 | 3.4W  | @ 10 Gbps |

This versatile 10 Gbps network card offers 16K Jumbo Frame and 802.1q VLAN tagging support, as well as compatibility with VMWare® ESXi 5.0/5.1, Microsoft Hyper-V® virtualization software, and iSCSI support to combine LAN and SAN functions.

Backed by a StarTech.com 2-year warranty and free lifetime technical support.

### Applications

- Transmit full 10-Gigabit network speeds to a remote terminal over longer distances than copper cabling
- Add 10Gbps network connectivity to file or application servers and high-performance workstations
- Ideal for secure setups - a direct fiber connection means no electronic interference, which can be a problem with RJ45 network cards
- Upgrade your onboard network adapter or existing SFP to 10 Gigabit SFP+, for faster communication
- Create a video / audio editing console with 10 Gbps access to network storage
- Perfect for remote embedded industrial monitoring systems, and high-speed video surveillance

### Features

- Faster networking with up to 10Gbps over fiber optic cabling
- Broad SFP+ compatibility and compliant with most 10 Gigabit SFP+ modules (10GBASE-LR/SR/LRM)
- Lower power consumption (4.12W max) than most comparable cards, with an energy-efficient chipset
- Virtualization (VMWare® ESXi 5.0/5.1 and Microsoft Hyper-V®) and iSCSI support
- Compliant with IEEE 802.3ae (10GBASE-LR/SR only) and IEEE 802.3aq (10GBASE-LRM)
- Up to 16K Jumbo Frame support
- Supports 802.3ad (Link Aggregation) and 802.1Q (VLAN Tagging)
- Compliant with PCI Express Rev 2.0 specification, using PCIe x4 (or higher) slot
- Supports Checksum Offload (IP, TCP, UDP) and Large Send Offload
- Supports PCI Message Signaled Interrupt (MSI)
- Configured with standard-profile bracket, low-profile/half-height bracket included, ideal for installation in 1U server and rackmount applications

**Technical Specifications**

|                               |   |
|-------------------------------|---|
| Warranty                      | 2 Years   |
| Bus Type                      | PCI Express   |
| Card Type                     | Standard Profile (LP bracket incl.)   |
| Chipset ID                    | Tehuti - TN4010<br>AMCC - QT2025  |
| Industry Standards            | IEEE 802.3ae (10GBASE-LR/SR only), IEEE 802.3aq (10GBASE-LRM)<br>PCI Express Rev 2.0  |
| Interface                     | Fiber (10 Gigabit Ethernet)   |
| Ports                         | 1   |
| Compatible Networks           | 10 Gbps   |
| Full Duplex Support           | Yes   |
| Jumbo Frame Support           | 16K max.  |
| Maximum Data Transfer Rate    | 20000 Mbps (20 Gbps) - Full-Duplex  |
| Supported Protocols           | IEEE 802.3ad (Link Aggregation)<br>IEEE 802.1Q (VLAN Tagging)<br>IEEE 802.1P (Layer 2 Priority Encoding)<br>IEEE 802.3x (2005 Flow Control Support)<br>RFC 2819 (RMON MIB Statistics)                                   |
| Connector Type(s)             | 1 - PCI Express x4 Male   |
| External Ports                | 1 - SFP+ Slot Female  |
| OS Compatibility              | Windows® 10 (32/64), 8 / 8.1 (32/64), 7 (32/64)<br>Windows Server® 2012, 2008 R2<br>Mac OS® 10.3 and later (tested up to 10.11)<br>Linux 2.6.24 and up (Tested up to 3.5)<br>VMWare® ESXi 5.0/5.1<br>Microsoft Hyper-V® |
| <b>Note</b>                   | Fiber data transfer speeds and distances are dependent on the SFP used (sold separately)  |
| System and Cable Requirements | Available PCI Express x4 slot   |
| System and Cable Requirements | Not compatible with 10/100/1000 Mbps SFP transceivers, 10 Gigabit SFP+ transceiver required   |
| LED Indicators                | 1 - Link/Activity (Green)   |
| Power Consumption             | 4.12W Max   |
| Humidity                      | 20~80% RH (Non-Condensing)  |

|                           |   |
|---------------------------|---|
| Operating Temperature     | 0°C to 70°C (32°F to 158°F)                                 |
| Storage Temperature       | -20°C to 85°C (-4°F to 185°F)                               |
| Product Height            | 120 mm [4.7 in]   |
| Product Length            | 84 mm [3.3 in]  |
| Product Weight            | 50 g [1.8 oz]   |
| Product Width             | 18 mm [0.7 in]  |
| Shipping (Package) Weight | 147 g [5.2 oz]  |
| Included in Package       | 1 - 1 Port PCI Express 10GBase-LR/SR/LRM Fiber Network Card |
| Included in Package       | 1 - Low-Profile Bracket                                     |
| Included in Package       | 1 - Driver CD   |
| Included in Package       | 1 - Instruction Manual                                      |

## Certifications, Reports and Compatibility

