

1000Base-SX (SC) Multi-Mode Fiber Gigabit PCI Express Card

PEX1000MMSC



FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Thank you for purchasing a StarTech.com Multi Mode Fiber Gigabit Ethernet Card. A simple solution for connecting a host computer directly to a fiber network, the PEX1000MMSC provides full gigabit performance, ensuring the fastest network connections and reliable performance.

Features

- 1000Mbps-Full-duplex
- Advanced Configuration Power Management Interface (ACPI) 2.0
- Cable diagnostic utility
- Compliant with RFC 1157 SNMP v1 which allows you to manage remotely
- Complies with IEEE 802.1Q, 802.1p, 802.3ab standards
- Microsoft NDIS5 (IP, TCP, UDP) checksum offload
- PCI Express 1.0a compliant
- Supports up to 9K Bytes jumbo frame
- Supports Wake-on-LAN remote wake-up

Package Contents

- 1 x Driver CD
- 1 x Instruction Manual
- 1 x PCI Express Gigabit Ethernet Adapter

Installation



WARNING! PCI Express cards, like all computer equipment, can be severely damaged by static electricity. Be sure that you are properly grounded before opening your computer case or touching your card.

StarTech.com recommends that you wear an anti-static strap when installing any computer component. If an anti-static strap is unavailable, discharge yourself of any static electricity build-up by touching a large grounded metal surface (such as the computer case) for several seconds. Also be careful to handle the card by its edges and not the gold connectors.

Hardware Installation

1. Turn OFF the computer power before installation.
2. Remove the chassis cover from your computer.
3. Locate an unused PCI Express slot and remove the corresponding slot cover from the rear panel of the computer chassis. Retain the screw (if applicable) used to hold the slot cover in place.
4. Align the PCI Express card with the unused PCI Express expansion slot. Applying pressure evenly across the top edge of the expansion card, firmly but gently insert the card into the slot, ensuring that the card is properly aligned with the rear panel slot.
5. Secure the card to the motherboard and rear chassis using the screw removed in step 3 (if necessary). Secure the additional serial port provided by the daughter board (smaller circuit board to an adjacent rear bracket).
6. Replace the chassis cover (removed in step 2).
7. Power on the computer. Once the computer has been rebooted, the operating system will detect that the PCI Express card has been installed and request driver installation, detailed in the next section.

Connecting to a Network

Please note: You must connect the PCI Express Fiber Gigabit Ethernet Adapter to the network before installing the network driver.

For connector type, cabling requirements, and maximum segment distance when connecting the PCI Express Gigabit Ethernet Adapter to your network, please refer to the following tables.

Connector Type on Fiber Adapter	Wavelength of 850nm Fiber Optic required	Maximum Distance (* full-duplex)
SC	Multi-mode, 62/125 μ m	550 m
Connector Type on Fiber Adapter	Wavelength of 1310nm Fiber Optic required	Maximum Distance (* full-duplex)
SC	Single-mode, 10/125 μ m	10 km
SC	Single-mode, 10/125 μ m	10 km
SC	Single-mode, 10/125 μ m	50 km

- Remove the protective covers from the PCI Express Fiber Gigabit Ethernet Adapter's connector.
- Prepare a network cable with corresponding connectors for the two end devices, one end to the PCI Express Fiber Gigabit Ethernet Adapter and the other to a 1000Mbps fiber port on the network switch.
- Connect the network cable to the connector on the PCI Express Fiber Gigabit Ethernet Adapter. This network cable consists of two individual cables: one for 'transmission (TX)', and the other for 'reception (RX)'.
- Connect the other end of the network cable to a 1000BASE-SX/LX switch.
- Insert the cable that is connected to the transmit (TX) connector on the PCI Express Fiber Gigabit Ethernet Adapter into the receive (RX) connector on the network switch.

- ii. Insert the cable that is connected to the receive (RX) connector on the PCI Express Fiber Gigabit Ethernet Adapter into the transmit (TX) connector on the network switch.
6. When the cable is properly connected to two end devices, turn on the power to the PC.
7. Check the LNK (Link) LED. The LED will come on when the PCI Express Fiber Gigabit Ethernet Adapter is receiving a good link signal from the connected device, a switch.

Software Installation

1. Once PEX1000MMSC has been installed in the computer, turn on the power to the computer.

2. When the *Found New Hardware Wizard* window pops up, select *Install from a list or specific location (Advanced)* and click *Next* to continue.



3. Select *Search for the best driver in these locations.* and then select *Include this location in the search.* Click *Browse* to specify the driver location and click *Next* to continue.



4. Installation will begin...



5. Click *Finish* to complete the driver installation.



Specifications

Applicable Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-SX/1000Base-LX IEEE802.3x IEEE802.1Q IEEE802.1p IEEE802.3ad
LED Indicators	Link, Activity
Operating Temperature	0°C to 45° C (32°F to 113°F)
Storage Temperature	-10°C to 70°C (14°F to 158°F)
Humidity	5%-95% non-condensing
Chipset	Realtek RTL8168B & Marvell 88E1111
Maximum Connection Distance	Up to 550m (1804')
OS Support	Windows XP, Vista™, Mac, Linux

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

Warranty Information

This product is backed by a lifetime warranty. In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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