User's Guide

SC-Type Fiber PCIe Adapter / Gigabit PCIe Adapter / SFP PCIe Adapter

TEG-ECSX / TEG-ECTX / TEG-ECSFP
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Product Overview

Package Contents

TEG-ECSX
- TEG-ECSX
- Multi-Language Quick Installation Guide
- CD-ROM (Drivers & User’s Guide)

TEG-ECTX
- TEG-ECTX
- Multi-Language Quick Installation Guide
- CD-ROM (Drivers & User’s Guide)

TEG-ECSFP
- TEG-ECSFP
- Multi-Language Quick Installation Guide
- CD-ROM (Drivers & User’s Guide)

If any package contents are missing or damaged, please contact the retail store, online retailer, or reseller/distributor from which the product was purchased.
TEG-ECSX
TRENDnet’s SC-Type Fiber PCIe Adapter, model TEG-ECSX, converts a free PCI Express slot into an SC-Type Multi-Mode fiber port. Advanced features include Jumbo Frame, Layer 2 Priority tagging, VLAN tagging, and SNMP support. The included standard bracket are compatible with Windows®, Mac®, and Linux® tower computer designs.

Features
SC-Type Fiber Port
Converts a PCIe slot into a 1000Base SC-Type Multi-Mode fiber slot
Jumbo Frame
Supports 9 K Jumbo Frames
LED Indicators
LED indicators convey port status
Monitoring
SNMP v1 protocol support
Traffic Management
802.1Q VLAN and 802.1p Class of Service (CoS) support
Brackets
Includes standard bracket
Operating Systems
Compatible with Windows®, Mac®, and Linux® operating systems

TEG-ECTX
TRENDnet’s Gigabit PCIe Adapter, model TEG-ECTX, converts a free PCI Express slot into a Gigabit Ethernet port. Advanced features include Jumbo Frame, Layer 2 Priority tagging, VLAN tagging, and SNMP support. The included standard bracket are compatible with Windows®, Mac®, and Linux® tower computer designs.

Features
Gigabit Port
Converts a PCIe slot into a 10/100/1000 Mbps Ethernet port
Jumbo Frame
Supports 9 K Jumbo Frames
LED Indicators
LED indicators convey port status
Monitoring
SNMP v1 protocol support
Traffic Management
802.1Q VLAN and 802.1p Class of Service (CoS) support
Brackets
Includes standard bracket
Operating Systems
Compatible with Windows®, Mac®, and Linux® operating systems

TEG-ECSFP
TRENDnet’s SFP PCIe Adapter, model TEG-ECSFP, converts a free PCI Express slot into an SFP fiber slot compatible with standard SFP modules. Advanced features include Jumbo Frame, Layer 2 Priority tagging, VLAN tagging, and SNMP support. The included standard bracket are compatible with Windows®, Mac®, and Linux® tower computer designs.

Features
SFP Slot
Converts a PCIe slot into a 1000Base SFP slot – compatible with standard SFP modules
Jumbo Frame
Supports 9 K Jumbo Frames
LED Indicators
LED indicators convey port status
Monitoring
SNMP v1 protocol support
Traffic Management
802.1Q VLAN and 802.1p Class of Service (CoS) support
Brackets
Includes standard bracket
Operating Systems
Compatible with Windows®, Mac®, and Linux® operating systems
**Product Hardware Features**

- **PCIe**: Connects your adapter to an available PCIe slot on your computer.
- **LED Indicator**: The LED will turn on when connected and blink rapidly to indicate data activity.

**System Requirements**

- CD-ROM Drive (Utility and Driver Installation with included CD)
- PCI Express 1.1 slot
- Multi-mode fiber cable (TEG-ECSX)
- Cat. 5e or Cat. 6 network cable (TEG-ECTX)
- SFP module and fiber cables compatible with SFP modules media specs. (TEG-ECSFP)
- Windows® 8 (32/64-bit), 7 (32/64-bit), Vista (32-bit), or XP (32/64-bit)
- Mac OS® 10.6 - 10.9
Installing your Adapter
This section describes how to install the software driver for your adapter.

Windows® OS Installation
1. Insert the included CD-ROM into your computer’s CD-ROM drive.
   **Note:** If you do not have the included CD-ROM, you can download the utility and drivers from [http://www.trendnet.com/downloads/](http://www.trendnet.com/downloads/).

2. At the CD Autorun Prompt window, click Run Autorun.exe.
   **Note:** If the Autorun prompt does not appear automatically, open the CD contents and double-click Autorun.exe.

3. At the CD-ROM main menu, click Install Drivers.

4. Follow the InstallShield Wizard and then click Finish.

5. Shutdown your computer and then open the computer’s case.

6. Insert the adapter firmly into an available PCI Express slot.
7. Close your computer case
8. Power on your computer and wait until the Windows desktop appears
9. Your computer will detect the adapter and will automatically install the drivers.

Connecting the TEG-ECTX to your network
1. Connect a Cat. 5e or Cat. 6 network cable from the TEG-ECTX adapter to an available Gigabit port on your Gigabit switch or router (e.g. TEW-818DRU).

Connecting the TEG-ECSX to your network
1. Connect a SC-type multi-mode cable from your TEG-ECSX adapter to a Gigabit multi-mode fiber device (e.g. TFC-1000MSC fiber converter).
2. Connect a Cat. 5e or Cat. 6 network cable from your Gigabit multi-mode fiber converter to a Gigabit port on your switch (e.g. TEG-S24Dg).

Note: The TX and RX cables must be reversed on the opposite fiber connection.

Connecting the TEG-ECSFP to your network
1. Insert a TRENDnet SFP module into the TEG-ECSFP adapter.
2. Connect a fiber cable from the adapter to a fiber device with a TRENDnet SFP module (e.g. TFC-1000MGB fiber converter with a TEG-MGBS10D3 + TEG-MGBS10D5).
3. Connect a Cat. 5e or Cat. 6 network cable from the multi-mode fiber converter to a Gigabit port on your switch or router.
Note:
1. The TX and RX cables must be reversed on the opposite fiber connection when using the TEG-MGBSX / TEG-MGBS10 / TEG-MGBS40 / TEG-MGBS80 SFP modules.

2. Cabling
   - Multi-Mode Fiber Optic Cable: TEG-MGBSX
   - Single-Mode Fiber Optic Cable: TEG-MGBS10 / TEG-MGBS40 / TEG-MGBS80

Using the diagnostic utility

The Diagnostics Utility is a Windows platform application and is only available for Windows Vista. It provides General Information, VLAN ID settings, Driver property settings, Diagnostics function, Statistics, Cable analysis, and Wake On LAN function.

1. Visit www.TRENDnet.com to save and download the diagnostic utility in the product download page.
2. Once the download is completed, unzip the file and double click on setup.exe icon.
3. Click Next to continue the installation.
4. Once the installation is complete, the utility window will automatically appear.

**Note:** If the utility does not appear, go to Programs → Realtek → Realtek Ethernet Diagnostic Utility to launch the Diagnostics Utility manually.

### Diagnostic Utility

**General**

This page displays general information about the selected network adapter.

**VLAN**

This page shows information about VLANs on the current selected network adapter. The user can add or remove VLAN here. The user can change the VLAN ID of existing VLAN.

**Driver**

This page displays driver information of the selected network adapter.
Advanced Setting
This page displays working parameters for this network adapter. The user can modify these parameters here.

Send and Receive
Two computers with adapters in the same LAN can perform send & receive experiments with broadcast packet here.

Diagnostics
This page performs hardware tests on the selected network adapter.

Statistics
This page show statistics of the selected network adapter, including throughput, number of good packets sent / received, and number of error packets sent / received.
Cable
This page estimates the length of the network (RJ-45) cable that is connected to the network adapter.

Note: This feature is not supported on the TEG-ECSFP.

Wake On LAN
This page provides two ways for the user to wake up a computer in standby or hibernate mode via the selected network adapter. A computer can be woken up only if related configurations in BIOS and the network adapter are enabled.

Note: This feature is not supported on the TEG-ECSFP.
Technical Specifications

**TEG-ECTX**

**Standards**
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3z
- IEEE 802.3ab

**Device Interface**
- 10/100/1000 Mbps Ethernet port
- PCI Express 1.1
- Standard profile bracket
- LED Indicators

**Supported OS**
- Windows 8.1, 8, 7, Vista, XP, Server 2003, 2000,
- Mac OS 10.4-10.7 (Intel-based)
- Linux 2.4, 2.6, 3.x

**Data Rate**
- Ethernet: 10 Mbps/20 Mbps (half/full-duplex)
- Fast Ethernet: 100 Mbps/200 Mbps (half/full-duplex)
- Gigabit: 2000 Mbps (full-duplex)

**Special Features**
- Power down and link down power savings
- Jumbo Frames up to 9 K
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Layer 2 priority tagging
- Preboot Execution Environment 2.1 (PXE)
- PCI Message Signaled Interrupt (MSI)
- Alert Standard Format 2.0 (ASF)
- SNMP v1 supported

**Power**
- Consumption: Max. 3.2 Watts

**Operating Temperature**
- 0 – 45 °C (32 - 113 °F)

**Operating Humidity**
- Max. 95% non-condensing

**Dimensions**
- 94 x 51 x 12 mm (3.7 x 2.0 x 0.5 in.)

**Weight**
- 52 g (1.8 oz.)

**Certifications**
- CE
- FCC

**Warranty**
- 3 year limited

**TEG-ECSX**

**Standards**
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.3
- IEEE 802.3u
• IEEE 802.3x
• IEEE 802.3z
• IEEE 802.3ab

**Device Interface**
• SC-type multi-mode fiber port
• PCI Express 1.1
• Standard profile bracket
• LED Indicators

**Supported OS**
• Windows 8.1, 8, 7, Vista, XP, Server 2003, 2000
• Mac OS 10.4-10.7
• Linux 2.4, 2.6, 3.x

**Data Rate**
• Gigabit: 2000 Mbps (full-duplex)

**Special Features**
• Power down and link down power savings
• Jumbo Frames up to 9 K
• IEEE 802.1Q VLAN tagging
• IEEE 802.1p Layer 2 priority tagging
• Preboot Execution Environment 2.1 (PXE)
• PCI Message Signaled Interrupt (MSI)
• Alert Standard Format 2.0 (ASF)
• SNMP v1 supported

**Power**
• Consumption: Max. 3.2 Watts

**Operating Temperature**
• 0 – 45 °C (32 - 113 °F)

**Operating Humidity**
• Max. 95% non-condensing

**Dimensions**
• 117.5 x 56 x 12 mm (4.6 x 2.2 x 0.5 in.)

**Weight**
• 52 g (1.8 oz.)

**Certifications**
• CE
• FCC

**Warranty**
• 3 year limited

**TEG-ECSFP**

**Standards**
• IEEE 802.1p
• IEEE 802.1Q
• IEEE 802.3
• IEEE 802.3u
• IEEE 802.3x
• IEEE 802.3z
• IEEE 802.3ab

**Device Interface**
• Mini-GBIC (SFP) slot
• PCI Express 1.1
• Standard profile bracket
• LED Indicators
Supported OS
- Windows 8.1, 8, 7, Vista, XP, Server 2003, 2000
- Mac OS 10.4-10.7
- Linux 2.4, 2.6, 3.x

Data Rate
- Gigabit: 2000 Mbps (full-duplex)

Special Features
- Power down and link down power savings
- Jumbo Frames up to 9K
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Layer 2 priority tagging
- Preboot Execution Environment 2.1 (PXE)
- PCI Message Signaled Interrupt (MSI)
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Power
- Consumption Max. 3.2 Watts

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- 0 – 45 °C (32 - 113 °F)

Operating Humidity
- Max. 95% non-condensing

Dimensions
- 117.5 x 56 x 12 mm (4.6 x 2.2 x 0.5 in.)

Weight
- 52 g (1.8 oz.)

Certifications
- CE
- FCC

Warranty
- 3 year limited
Troubleshooting

Q: I inserted the Driver CD-ROM into my computer's CD-ROM Drive and the installation menu does not appear automatically. What should I do?
Answer:
1. For Windows 7, if the installation menu does not appear automatically, click on the Windows Icon on the bottom left hand corner of the screen, click the "Search programs and files" box, and type D:\Autorun.exe where "D" in "D:\Autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.
2. For Windows Vista, if the installation menu does not appear automatically, click Start, click the Start Search box, and type D:\Autorun.exe where "D" in "D:\autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.
3. For Windows 2000/XP, if the installation menu does not appear automatically, click Start, click Run, and type D:\Autorun where "D" in "D:\Autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.

Q: Windows does not recognize my new hardware. What should I do?
1. First, verify if your computer meets the system requirement on Technical Specification section.
2. Second, access your device manager to make sure the adapter is installed properly.
   - To access the device manager on Windows 8/7/Vista, right-click Computer, click Properties and then click Device Manager.
   - To access the device manager on Windows XP, right-click My Computer, click Properties, click the Hardware tab, and then click Device Manager.
3. Third, if the device manager fails to recognize the presence of a new network adapter, verify that the network adapter is firmly seated in the PCIe slot.

Q: Windows recognizes my new hardware, but I’m unable to connect to my Network. What should I do?
1. Make sure that the network device that is connected to the TEG-xxx adapter is Gigabit.
2. There might be a problem with the fiber cable connection. Make sure that you have the fiber cable connected correctly as describe on the Fiber Cable section.
3. Another possible problem may be that the network device such as Fiber Converter is not functioning properly. Please confirm the power for the devices are connected and functioning properly.

Q: Windows has automatically installed drivers, why do I need to install the drivers from the CD-ROM?
1. Windows has built-in drivers. However, the CD-ROM has the latest drivers.

Q: What is the maximum distance that is supported by the adapter?
1. Multi-Mode Fiber Optic Cable
   50/125 µm up to 550 m
   62.5/125 µm up to 220 m
2. Single-Mode fiber optic cable
   9/125 µm up to 80 m
Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

- TEG-ECX/TEG-ECTX/TEG-ECXFP – 3 Years Warranty
- AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall, at its option, repair or replace the defective product with a new or reconditioned product. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credits. Please contact the point-of-purchase for their return policies.

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There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

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