User's Guide

TRENDnet®

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

TEG-ECSX / TEG-ECTX / TEG-ECSFP

Contents

Product Overview

TEG-ECSX

TEG-ECTX

TEG-ECSFP

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
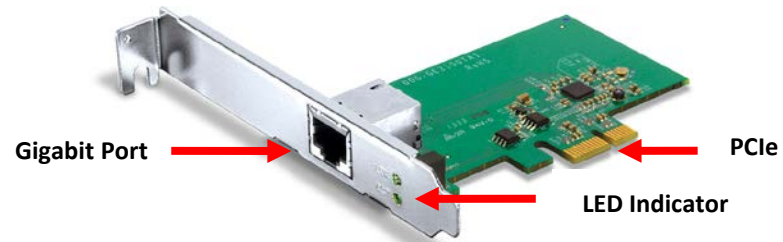802.1Q VLAN and 802.1p Class of Service (CoS) support
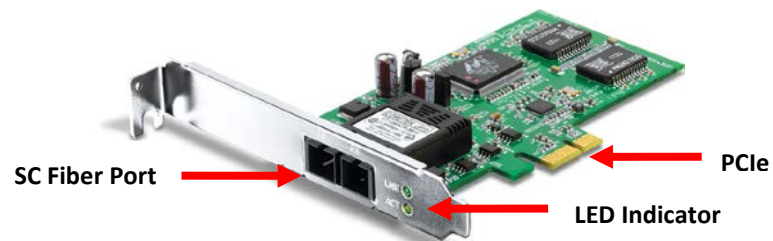
Brackets

Includes standard bracket

Operating Systems
Compatible with Windows®, Mac®, and Linux® operating systems

Product Hardware Features

Gigabit Port →

PCIe →

← LED Indicator

TEG-ECSX

SC Fiber Port →

PCIe →

← LED Indicator

TEG-ECTX

SFP Slot →

PCIe →

← LED Indicator

TEG-ECSFP

- **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/.
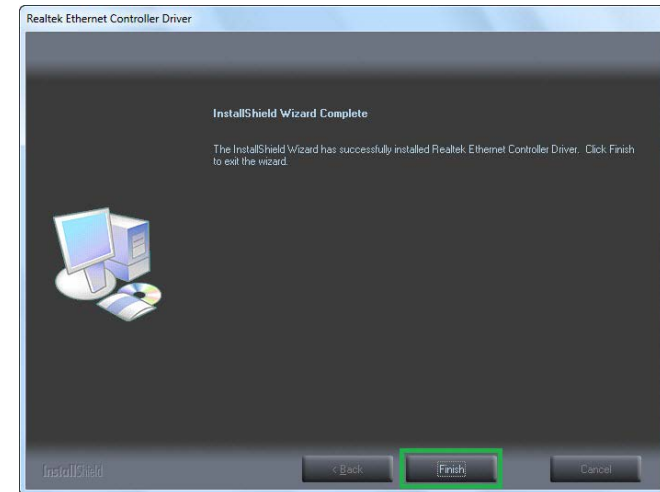
2. At the CD Autorun Prompt window, click *Run Autorun.exe*.

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).
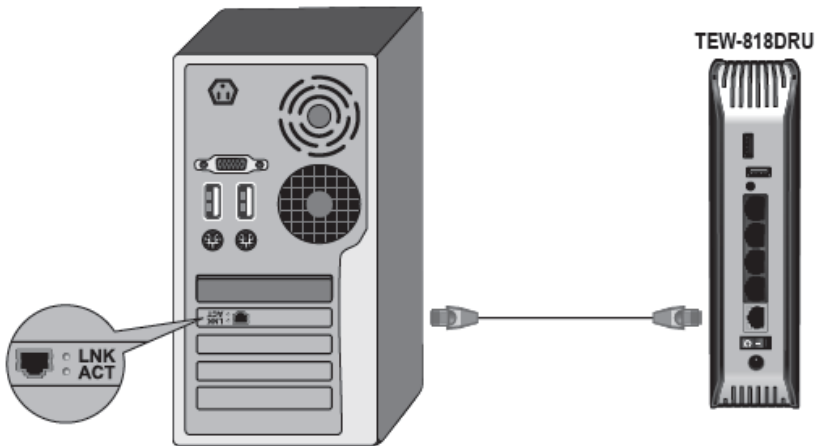

Connecting the TEG-ECSX to your network

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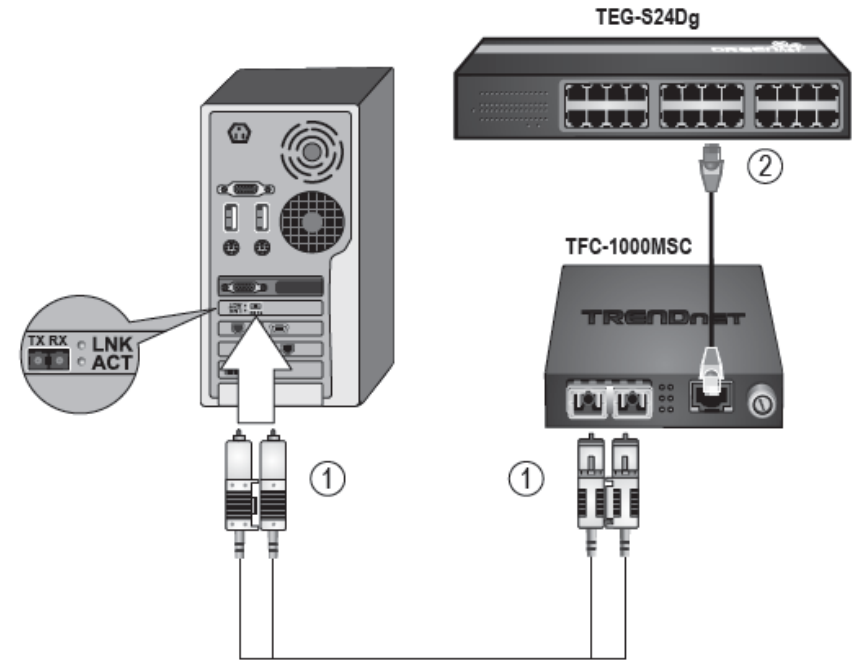
Note: *The TX and RX cables must be reversed on the opposite fiber connection.*

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.
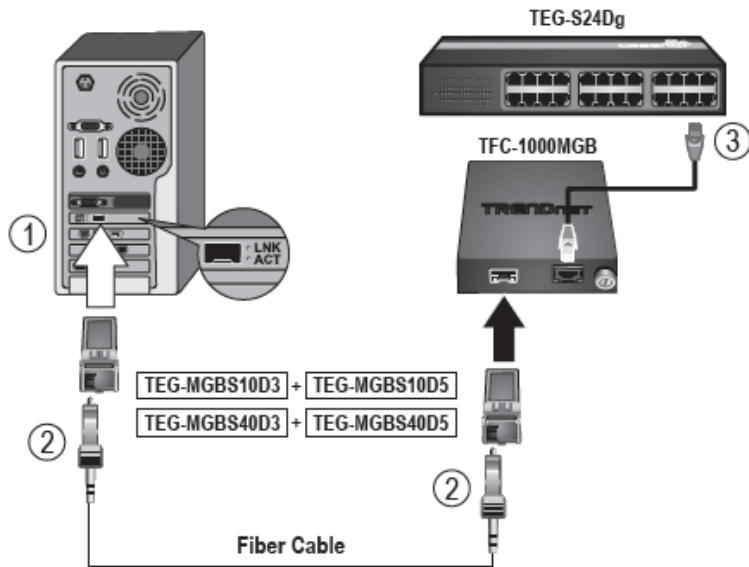
Note:

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*
- *Single Strand Fiber Optic Cable: TEG-MGBS10D3 / TEG-MGBS10D5 / TEG-MGBS40D3 / TEG-MGBS40D5*
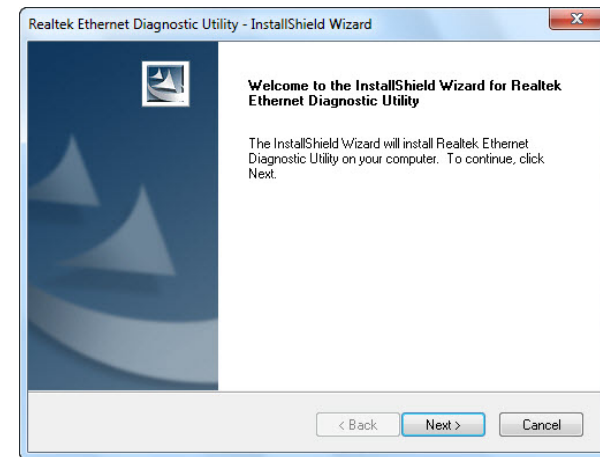
Using the diagnostic utility

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.
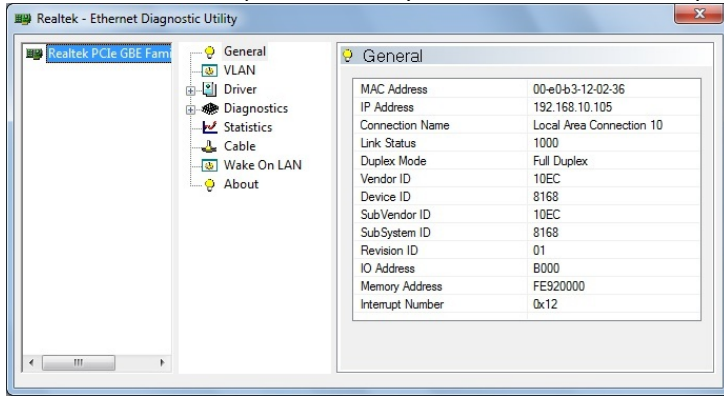
1. Visit www.TRENDnet.com to save and download the diagnostic utility in the product download page.

2. Once the download is completed, unzip the file and double click on **setup.exe** icon.
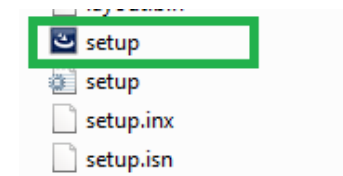
3. Click **Next** to continue the installation.

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.
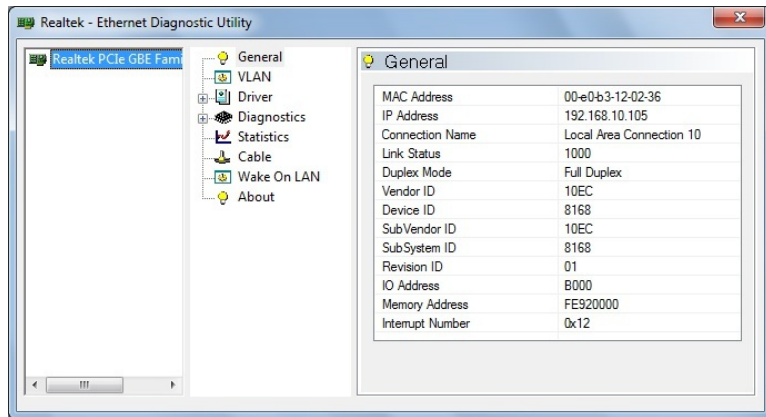
VLAN

This page shows information about VLANs on current selected network adapter. 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.
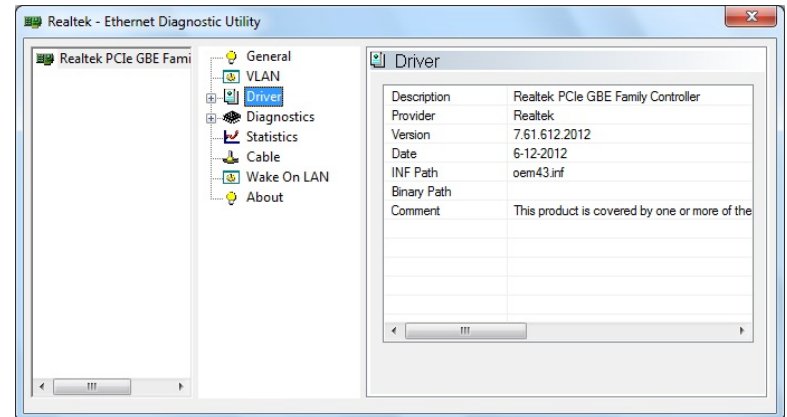
Advanced Setting

This page displays working parameters for this network adapter. The user can modify these parameters here.

Diagnostics

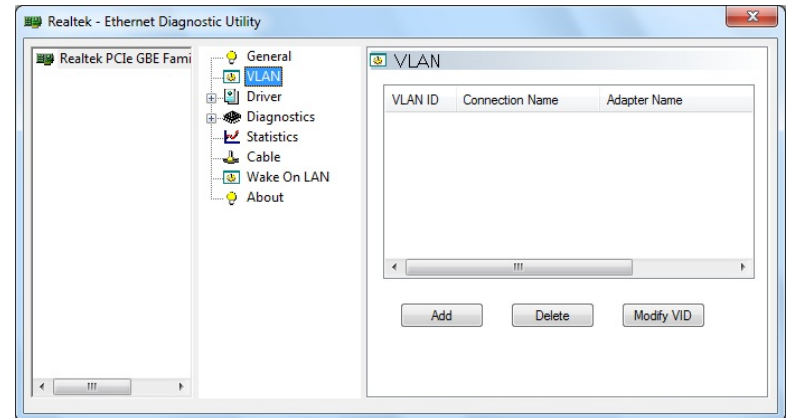This page performs hardware tests on the selected network adapter.

Send and Receive

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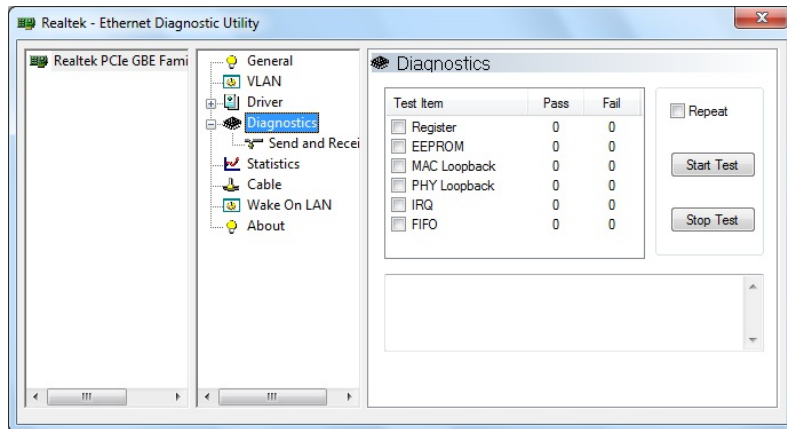
Statistics

This page show statistics of the selected network adapter, including throughput, number of good packets sent / received, and number of error packets sent / received.
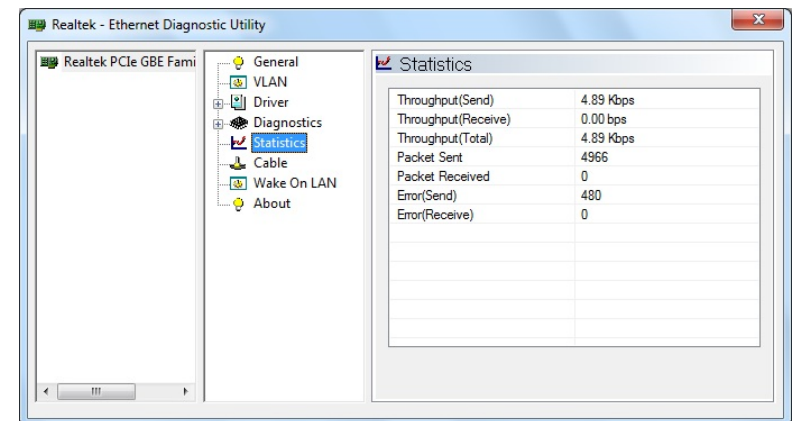
Cable

This page estimates the length of the network (RJ-45) cable that is connected to the network adapter.
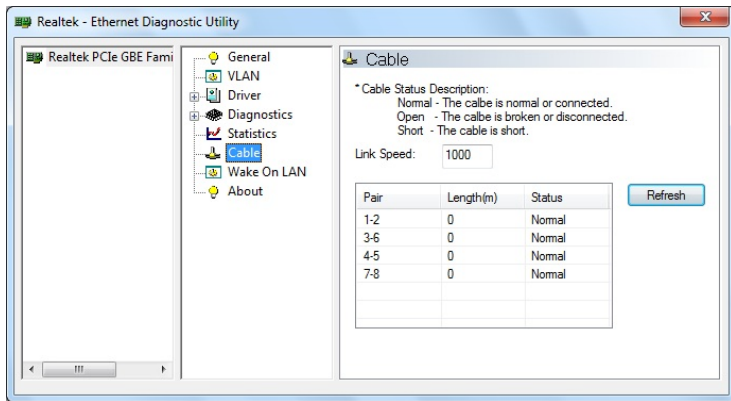
Note: *This feature is not supported on the TEG-ECSFP.*

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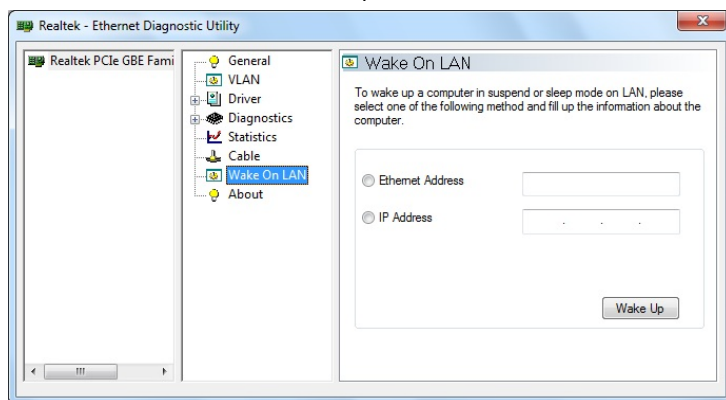
Note: *This feature is not supported on the TEG-ECSFP.*

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 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)
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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

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-ECSX/TEG-ECTX/TEG-ECSFP – 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 reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

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Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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Product Warranty Registration

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