

User's Guide



TRENDNET®



**100Base SC Fiber PCIe Adapter
Low Profile 100Base SC Fiber PCIe Adapter**

TE100-ECFX / TE100-ECFXL

Contents

Product Overview	2
Package Contents.....	2
Features.....	2
Product Hardware Features	3
Application Diagram.....	4
Installation - Hardware	4
Adapter	4
Fiber Cable.....	5
Cabling Requirements.....	5
Installation - Software	6
Driver	6
Diagnostic Utility.....	9
Configuration of Diagnostic Utility.....	11
General.....	11
VLAN.....	11
Driver -> Advanced Setting.....	11
Diagnostics	12
Diagnostics -> Send and Receive.....	12
Statistics	12
Cable	12
Wake On LAN.....	13
EEE Status.....	13
Technical Specifications	13
Troubleshooting.....	14

Product Overview



TE100-ECFX



TE100-ECFXL

Package Contents

TE100-ECFX package includes:

- 1 x TE100-ECFX
- Quick Installation Guide
- CD-ROM (Driver & User's Guide)

TE100-ECFXL package includes:

- 1 x TE100-ECFXL
- Quick Installation Guide
- CD-ROM (Driver & User's Guide)

Features

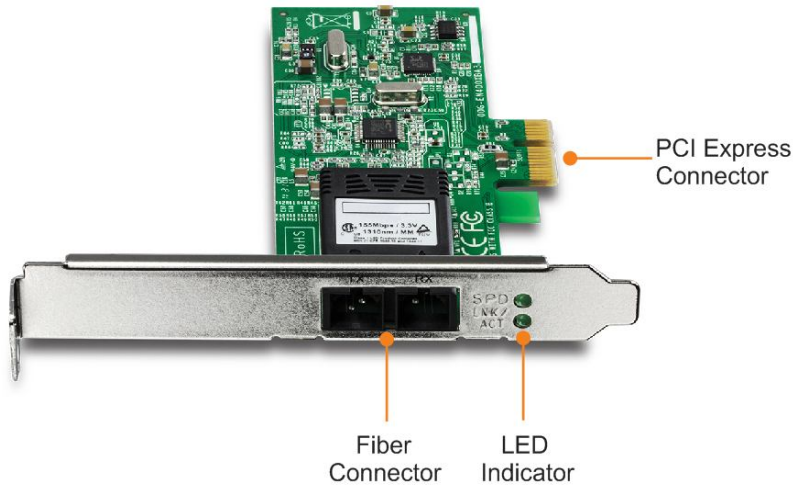
The 100Base SC Fiber PCIe Adapter, model TE100-ECFX, or the Low Profile 100Base SC Fiber PCIe Adapter, Model TE100-ECFXL, provides a reliable high performance connection from a PC or server to a Multi-Mode SC-type fiber connection for distances of up to 2 kilometers (1.2 miles).

Full-Duplex technology generates data rates of up to 200 Mbps. Supports Wake-on-LAN, remote wake-up, 802.1p priority encoding, and 802.1Q VLAN tagging. Compatible with Microsoft Windows 8, Windows 7, Server 2008, Unix, and Linux operating systems.

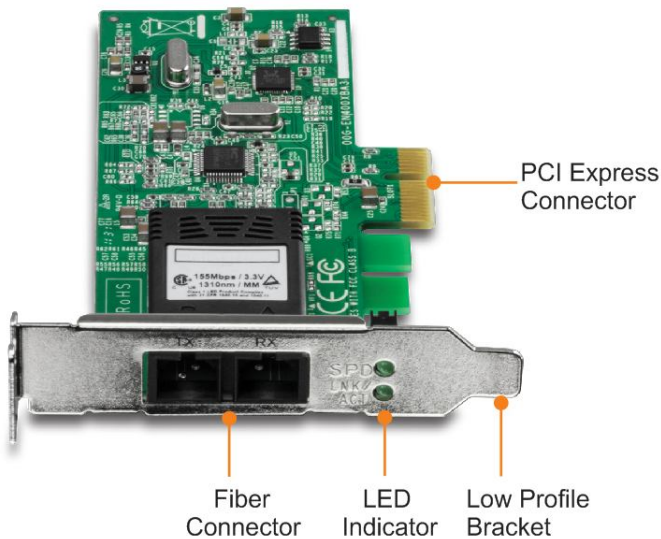
- 100Base SC-type Multi-Mode fiber to PCIe adapter
- Supports fiber connections for distances of up to 2 km (1.2 miles)
- Wake-on-LAN, 802.1p, and 802.1Q support
- Compatible with Windows 8, Windows 7, Windows Server 2008, Unix, and Linux operating systems

Product Hardware Features

TE100-ECFX



TE100-ECFXL

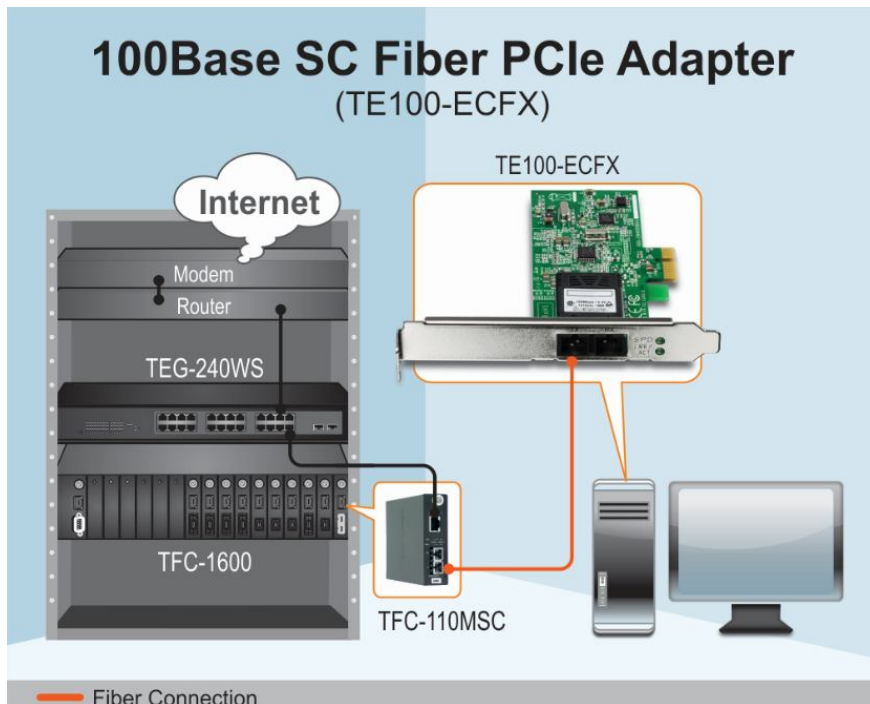


- **PCI Express Connector:** Connect the PCI Express card into computer's PCIe slot.
- **Fiber Connector:** Connect one end of the fiber cable to adapter's fiber connector and connect the other end to the fiber Network.
- **LED Indicators**

LEDs	Status	Indication
LNK/ACT (Link/Activity)	Steady (green)	Network connection established.
	Blinking (green)	Transmitting or receiving data. ACT stands for ACTIVITY.
	Off	No connection/activity
SPD (Speed)	Steady (green)	100Mbps.
	Off	10Mbps.

- **Low Profile Bracket:** used for low profile computer

Application Diagram



Installation - Hardware

Adapter

1. Power off the computer
2. Remove any metal object from your hand and wrists to prevent shocks
3. Remove the cover from your computer's tower
4. Locate an empty PCI Express slot and remove the corresponding back plate. Save the screws for use in step 6.
5. Carefully insert the PCI Express adapter into the slot and ensure the adapter is firmly seated in the slot.
6. Secure the PCI Express adapter with the screws that you saved in step 4.
7. Replace the PC cover

Fiber Cable

This section describes how to connect the TE100-ECFX or TE100-ECFXL to a 100 Mbps fiber-based Ethernet network, which contributes to its optimal performance.

Please ensure that you installed the TE100-ECFX or TE100-ECFXL into the computer before installing the driver.

1. Remove the protective rubber covers from the TE100-ECFX or TE100-ECFXL.
2. Connect one end of the fiber cable to TE100-ECFX or TE100-ECFXL and then connect the other end of the fiber cable to the fiber converter or fiber port into the fiber network.

Note: The fiber cable comes with a pair. Some of them may mark as Transmitter (TX) and Receiver (RX), some of them may have color coded or have letters on each end. Make ensure that you have one end (TX) of the fiber cable connects to the TX port of the TE100-ECFX or TE100-ECFXL and have the other end of the (TX) connects to the fiber's network device's RX port as example showed below.



3. Turn on the computer
4. Windows will automatic install the driver.
5. Check the LNK (link) LED on the TE100-ECFX or TE100-ECFXL. The LNK LED will be steady on to indicate the network connection is establish.

Cabling Requirements

For connector type, cabling requirements, and maximum segment distance when connecting the PCI Express Ethernet Adapter to your network, please refer to the following table. The table listed below showed the type of cable that connected to TE100-ECFX or TE100-ECFXL PCI-e adapter. You may also choose the proper fiber cable that suitable for your network usage.

Connector Type on Fiber Adapter	Wavelength of 1300nm Fiber Optic required	Maximum Distance (* full-duplex)
SC	Multi-mode, 50/125 μm	550m
SC	Multi-mode, 62.5/125 μm	2 km

<Note>

The maximum node-to-node network distance is in full-duplex operation.

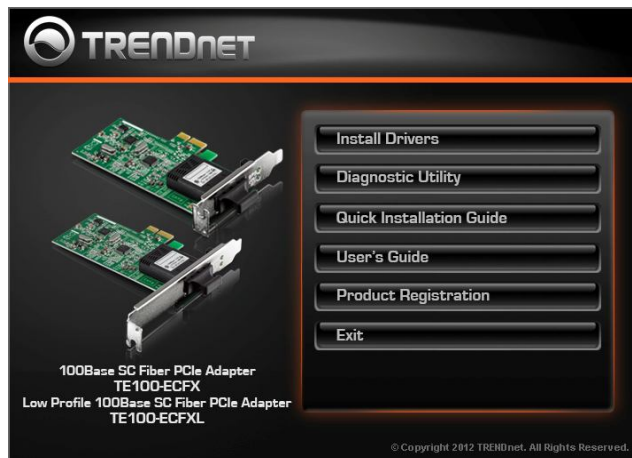
Installation - Software

Driver

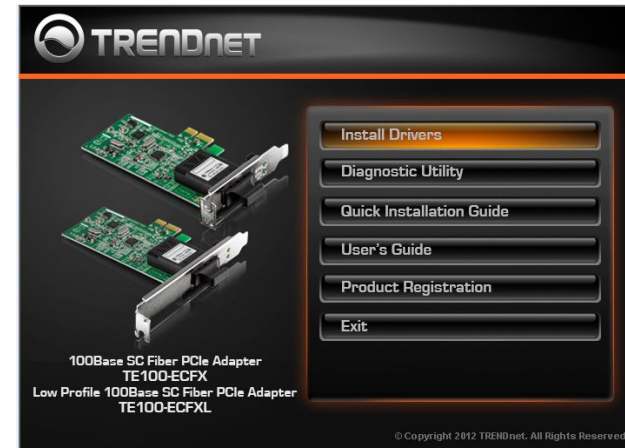
Windows 8 / 7 / Vista / 2008 Server

The CD-ROM includes the latest drivers for TE100-ECFX or TE100-ECFXL. It is highly recommend that you install the drivers from the CD-ROM.

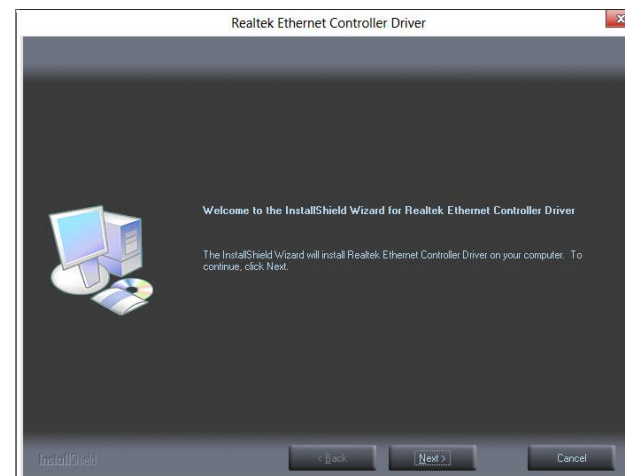
1. Insert the Installation CD-ROM into your computer's CD-ROM drive to initiate the Auto-Run program.



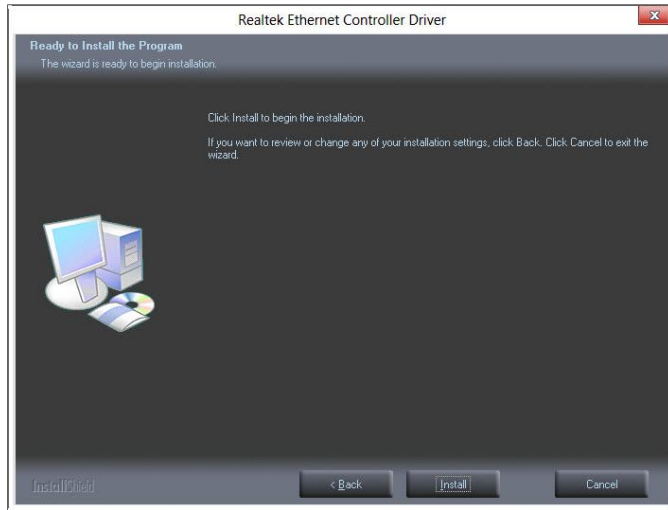
2. Click **Install Drivers**



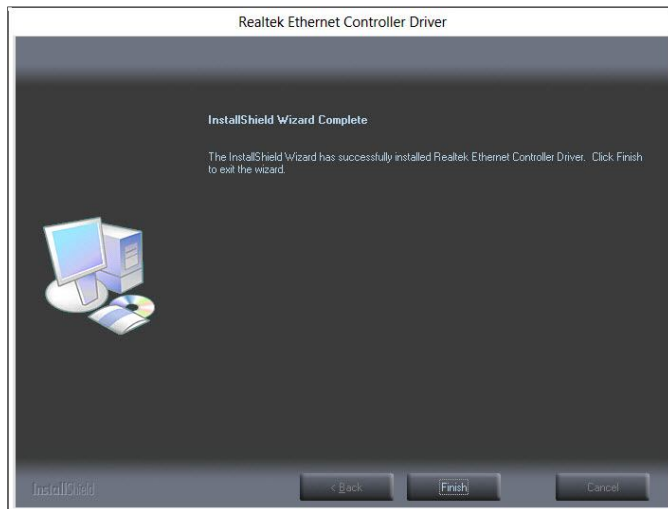
3. Click **Next**



4. Click **Next**

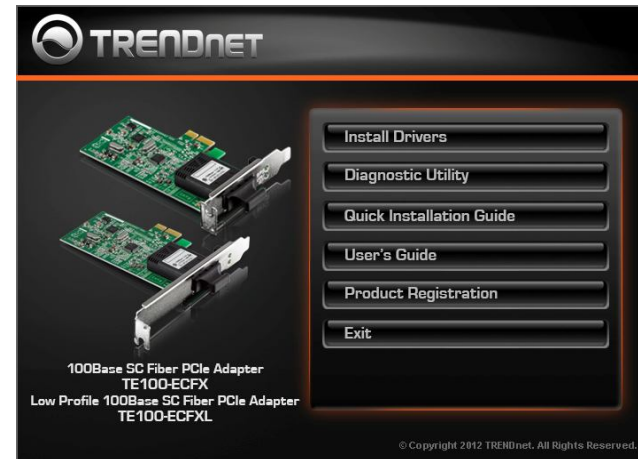


5. Click **Finish**

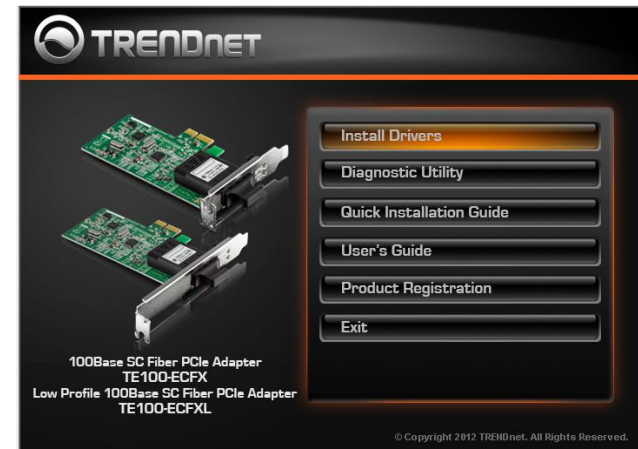


Windows 2003 / XP

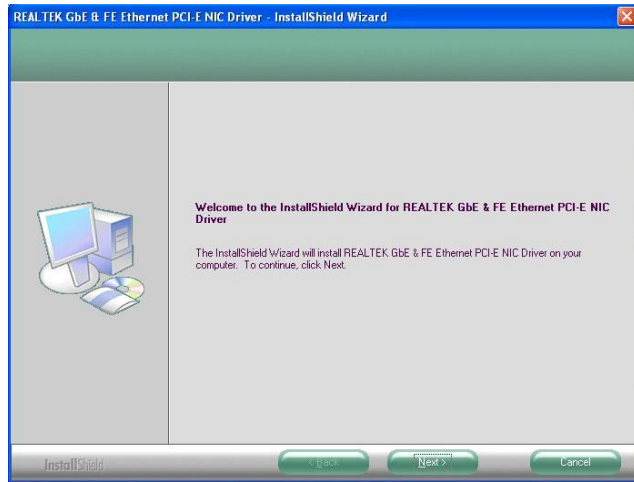
1. Insert the Installation CD-ROM into your computer's CD-ROM drive to initiate the Auto-Run program.



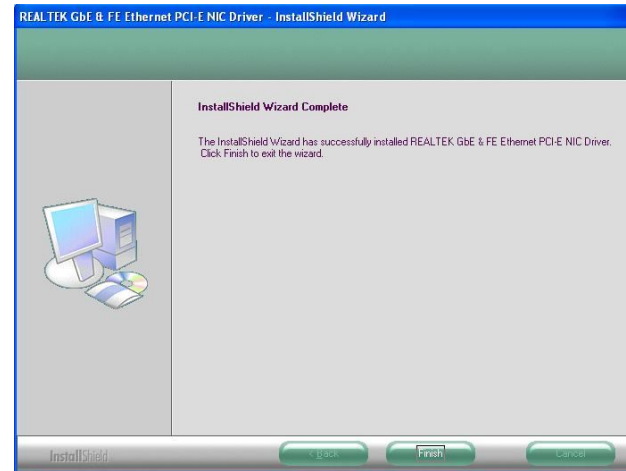
2. Click the **Install Drivers**



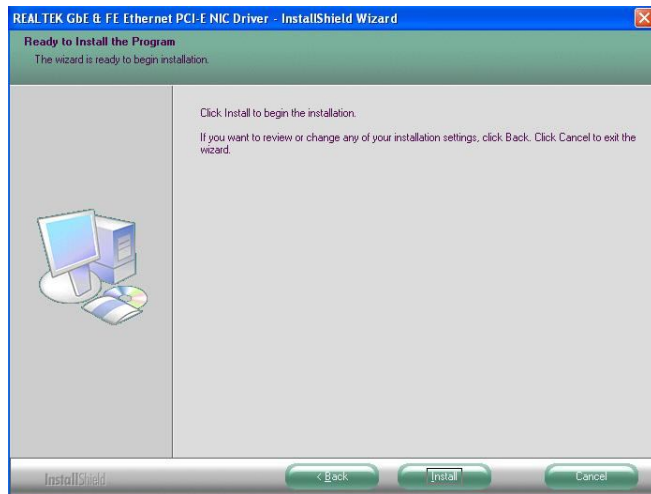
3. Click **Next**



5. Click **Finish**



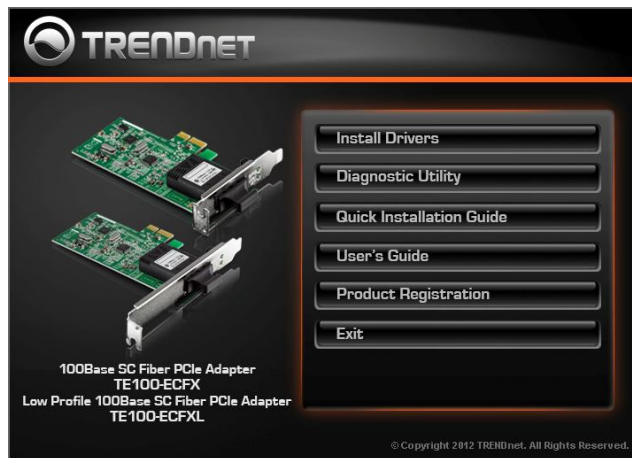
4. Click **Install**



Diagnostic Utility

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

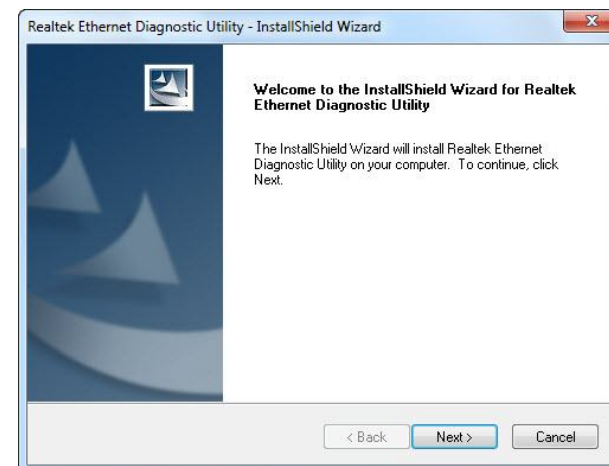
1. Insert the Installation CD-ROM into your computer's CD-ROM drive to initiate the Auto-Run program.



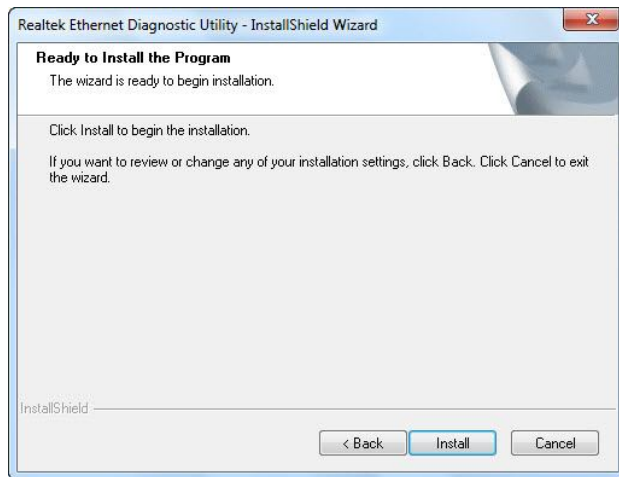
2. Click **Diagnostic Utility**



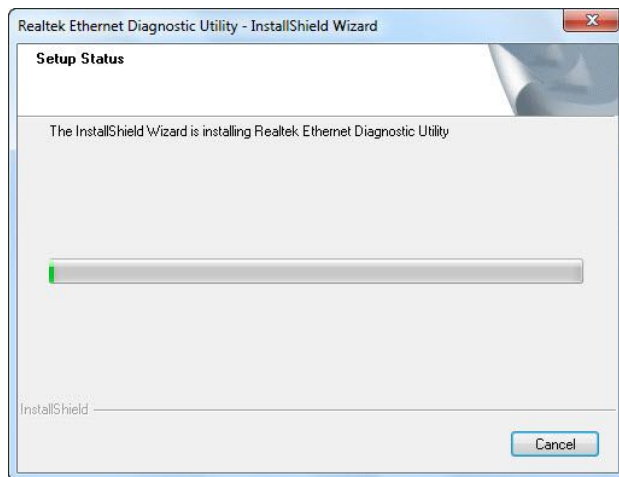
3. Click **Next**



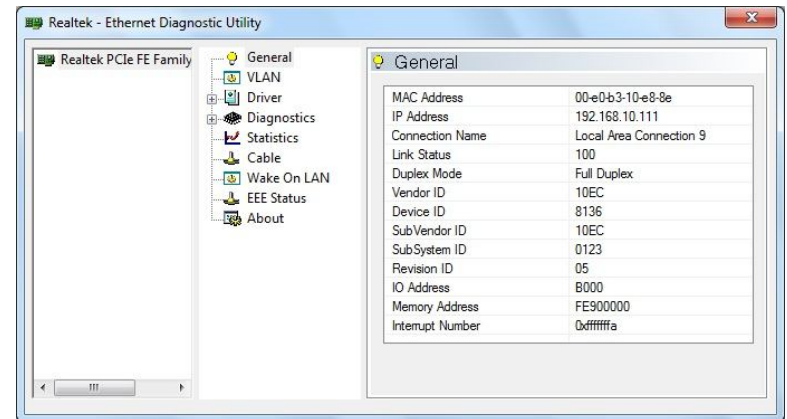
4. Click **Install**



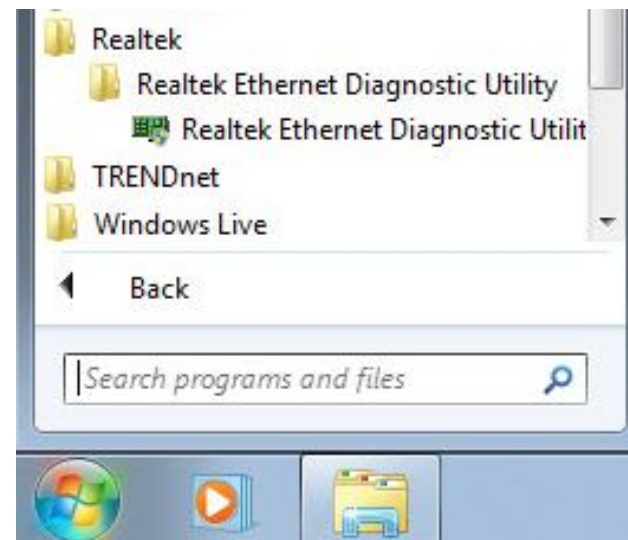
5. Wait while the Diagnostic Utility install on your computer



6. The diagnostic utility will automatically pop up the installation has finished.



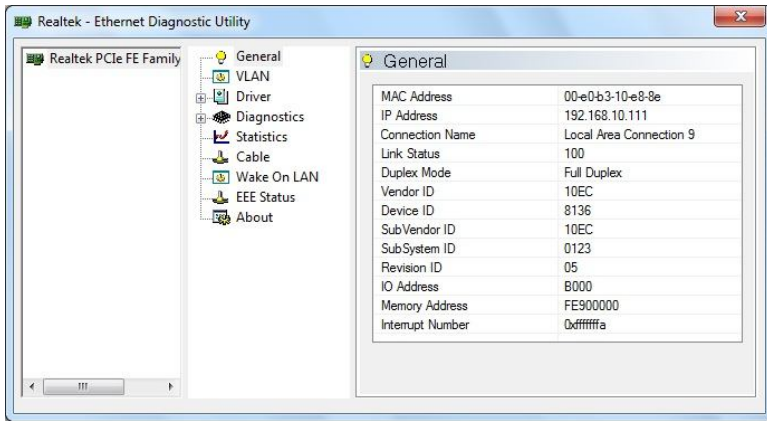
7. You can go to **Programs → Realtek → Realtek Ethernet Diagnostic Utility** to launch the Diagnostics Utility manually.



Configuration of Diagnostic Utility

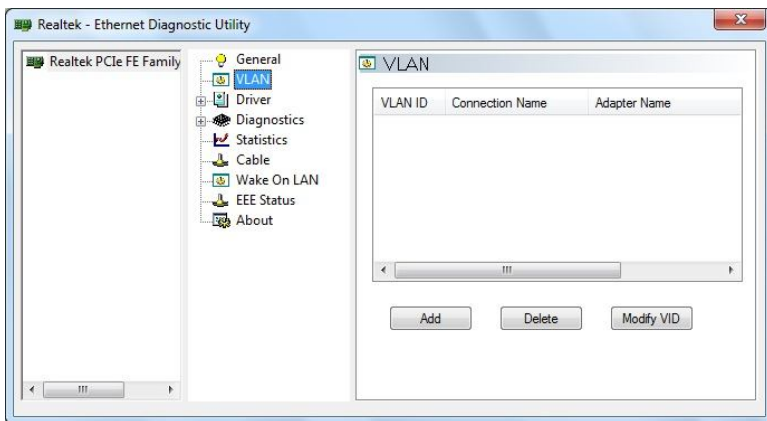
General

This page displays general information about the selected network adapter.



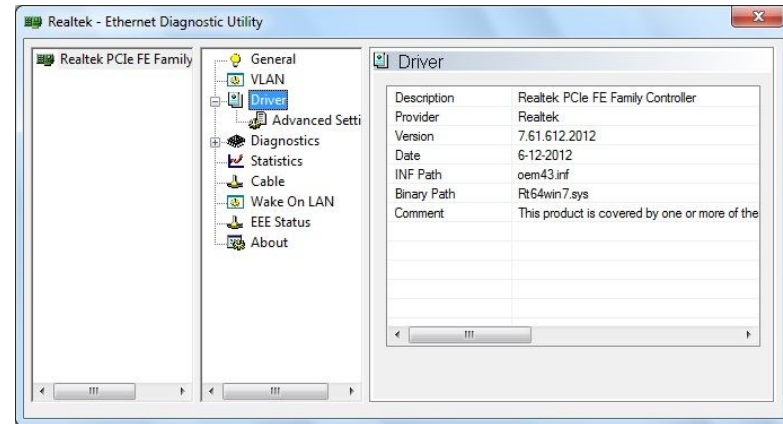
VLAN

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.



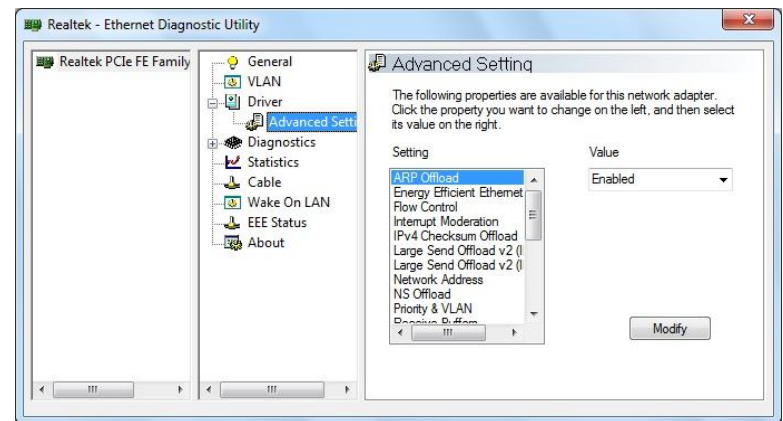
Driver

This page displays driver information of the selected network adapter.



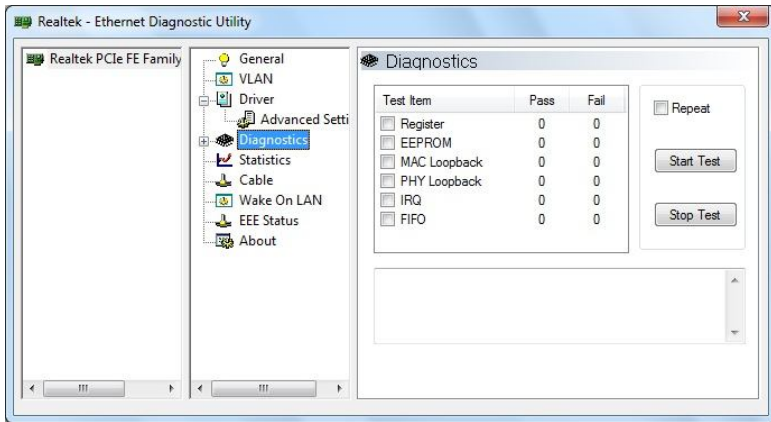
Driver -> Advanced Setting

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



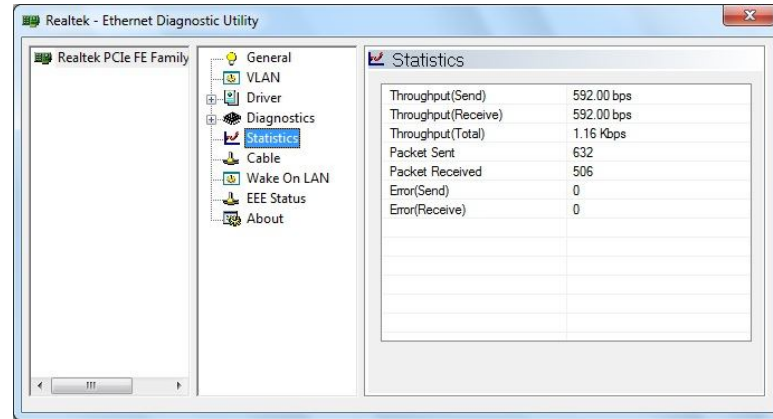
Diagnostics

This page performs hardware tests on selected network adapter.



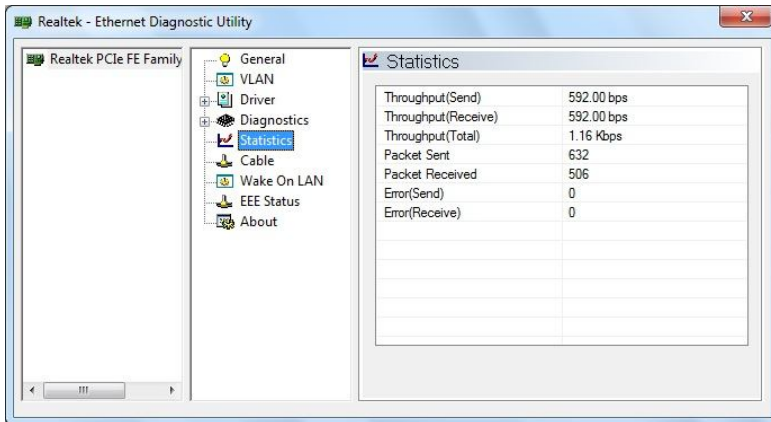
Statistics

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



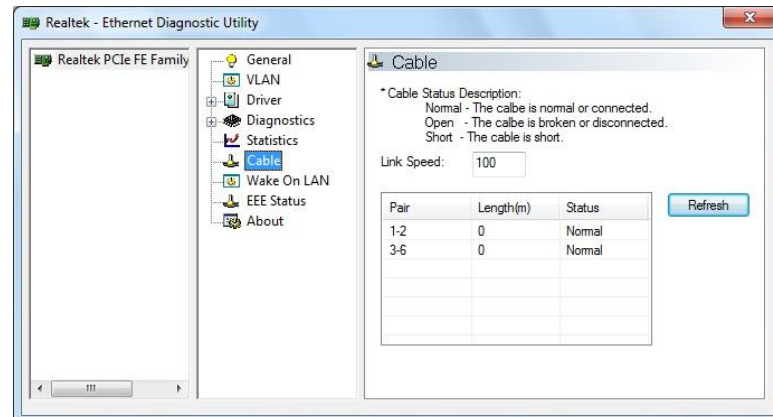
Diagnostics -> Send and Receive

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



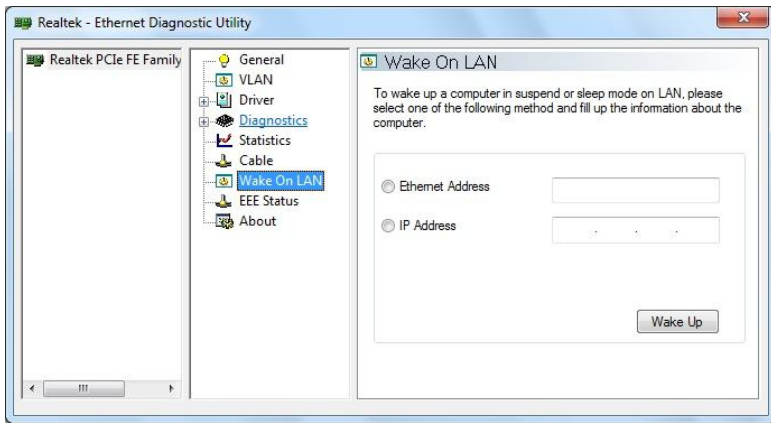
Cable

This page estimates the length of the network (RJ-45) cable that is connected to the network adapter. This feature is not supported on the TE100-ECFX, TE100-ECFXL.



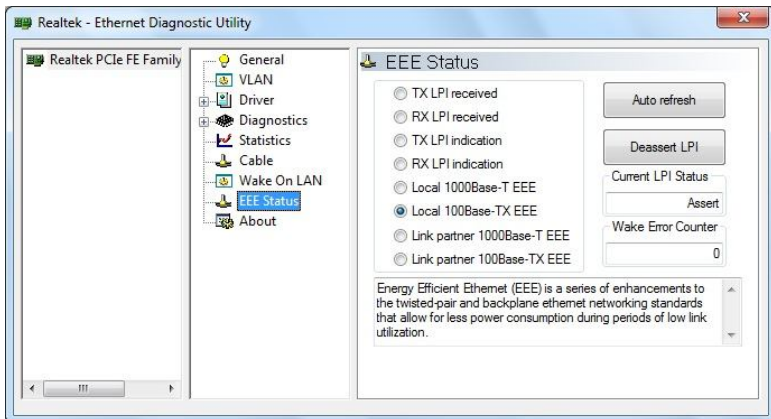
Wake On LAN

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



EEE Status

This page shows information about EEE status. User can change the current LP status to minimize system power consumption.



Technical Specifications

Hardware	
Standards	IEEE 802.3u 100Base-FX IEEE 802.3x, IEEE 802.1Q, IEEE 802.1p
Network Media	Multi-mode fiber optic cable 50/125 μm up to 550m or 62.5/125 μm up to 2km
Interface	PCI Express, SC-type slot
Power Consumption	Max. 2 watts
Diagnostic LED	Speed, Link/Activity
Supported OS	Windows 8 (32/64-bit) / 7 (32/64-bit) / Vista (32/64-bit) / XP (32/64-bit), Windows Server 2003, 2008 Linux Kernel 2.4.x / 2.6.x
Data Rate	100 Mbps (half-duplex) 200 Mbps (full-duplex)
Dimension	TE100-ECFX : 117 x 107 x 57 mm (4.6 x 4.2 x 2.2 in) TE100-ECFXL: 80 x 107 x 57 mm (3 x 4.2 x 2.2 in.)
Weight	TE100-ECFX : 45g (1.6 oz.) TE100-ECFXL: 40 g (1.4 oz.)
Temperature	Operating: 0°C ~ 50°C (32°F ~ 122°F) Storage: -10°C ~ 70°C (14°F ~ 158°F)
Humidity	Max. 95% (non-condensing)
Certifications	CE, FCC

Troubleshooting

1. Windows does not recognize my new hardware. What could I do?

First, verify if your computer meets the system requirement on **Technical Specification** section.

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

Third, if the device manager fails to recognize the presence of a new networking adapter, verify that the network adapter is firmly seated in the PCIe slot.

2. Windows recognizes my new hardware, but I'm unable to connect to my Network. What should I do?

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.

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 well connected and functioning properly.

3. Why the Windows has automatic install the driver and I need to install the driver from the CD-ROM again.

Windows has built-in drivers. However, the CD-ROM have update driver to support the adapters.

4. What is the maximum distance that is supported by the adapter?

The adapter supports multi-mode fiber optic cable with the following distance.

50/125 μm up to 550m

62.5/125 μm up to 2km

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-ECFX, TE100-ECFXL – 3 Years Limited 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.

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.

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.

WARRANTIES EXCLUSIVE: IF THE TRENDNET PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE, AT TRENDNET'S OPTION, REPAIR OR REPLACE. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TRENDNET NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION MAINTENANCE OR USE OF TRENDNET'S PRODUCTS.

TRENDNET SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLIGENCE, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO REPAIR OR MODIFY, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OR OTHER HAZARD.

LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW TRENDNET ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT TRENDNET'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Governing Law: This Limited Warranty shall be governed by the laws of the state of California.

Some TRENDnet products include software code written by third party developers. These codes are subject to the GNU General Public License ("GPL") or GNU Lesser General Public License ("LGPL").

Go to <http://www.trendnet.com/gpl> or <http://www.trendnet.com> Download section and look for the desired TRENDnet product to access to the GPL Code or LGPL Code.

These codes are distributed WITHOUT WARRANTY and are subject to the copyrights of the developers. TRENDnet does not provide technical support for these codes. Please go to <http://www.gnu.org/licenses/gpl.txt> or <http://www.gnu.org/licenses/lgpl.txt> for specific terms of each license.

V1.0R /10.05.2012



Product Warranty Registration

Please take a moment to register your product online.
Go to TRENDnet's website at <http://www.trendnet.com/register>

TRENDnet
20675 Manhattan Place
Torrance, CA 90501. USA