

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

TE100-ECFX / TE100-ECFXL

Contents

	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	
General VLAN	11
General VLAN Driver -> Advanced Setting	
General VLAN Driver -> Advanced Setting Diagnostics	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive Statistics	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive Statistics Cable	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive Statistics Cable Wake On LAN	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive Statistics Cable Wake On LAN EEE Status	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive Statistics Cable Wake On LAN EEE Status Technical Specifications	
General VLAN Driver -> Advanced Setting Diagnostics Diagnostics -> Send and Receive Statistics Cable Wake On LAN EEE Status Technical Specifications Troubleshooting	

TE100-ECFX / TE100-ECFXL

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

TE100-ECFX / TE100-ECFXL

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

• Low Profile Bracket: used for low profile computer

TE100-ECFX / TE100-ECFXL

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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 towel
- 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

TE100-ECFX / TE100-ECFXL

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.

TE100-ECFX / TE100-ECFXL

Installation - Software

<u>Driver</u>

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



TE100-ECFX / TE100-ECFXL

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.

AD .	
	Install Drivers
	Diagnostic Utility
Allow and a second	Quick Installation Guide
a la fa	User's Guide
19	Product Registration
	Exit
100Base SC Fiber PCle Adapter TE100-ECFX	
Low Profile 100Base SC Fiber PCle Adapter TE100-ECFXL	

2. Click the Install Drivers

Allow 20	Install Drivers
a la	Diagnostic Utility
All and a second s	Quick Installation Guide
a la posta de la companya de la comp	User's Guide
199	Product Registration
	Exit
100Base SC Fiber PCIe Adapter TE100-ECFX Low Profile 100Base SC Fiber PCIe Adapter TE100-ECFXL	
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TE100-ECFX / TE100-ECFXL

3. Click Next



4. Click Install



5. Click Finish



TE100-ECFX / TE100-ECFXL

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.

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luick Installation Guide
ser's Guide
roduct Registration
xit

2. Click Diagnostic Utility



3. Click Next

The InstallShield Wizard will install Realtek Ethernet Diagnostic Utility on your computer. To continue, click Next.

TE100-ECFX / TE100-ECFXL

4. Click Install

Ready to Install the Program	
I he wizard is ready to begin insi	allation.
Click Install to begin the installat	ion.
If you want to review or change the wizard.	any of your installation settings, click Back. Click Cancel to ex
tallShield ———	

5. Wait while the Diagnostic Utility install on your computer



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

Realtek PCIe FE Family	General	💡 General	
	🕀 🕘 Driver	MAC Address	00-e0-b3-10-e8-8e
	🕀 🦛 Diagnostics	IP Address	192.168.10.111
	July Statistics	Connection Name	Local Area Connection 9
	- Cable	Link Status	100
	Wake On LAN	Duplex Mode	Full Duplex
- Let	A FEE Status	Vendor ID	10EC
	Ren About	Device ID	8136
	Tes About	SubVendor ID	10EC
		SubSystem ID	0123
		Revision ID	05
		IO Address	B000
		Memory Address	FE900000
		Interrupt Number	0xffffffa
III. Þ			

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



TE100-ECFX / TE100-ECFXL

Configuration of Diagnostic Utility

General

This page displays general information about the selected network adapter.

Realtek PCIe FE Family	General	💡 General	
	→ ● VLAN ⊕ ●	MAC Address IP Address Connection Name Link Status Duplex Mode Vendor ID Device ID SubVendor ID SubVendor ID SubVendor ID IO Address Memory Address Interrupt Number	00+0-b3-10+8-8e 192.168.10.111 Local Area Connection 9 100 Full Duplex 10EC 8136 10EC 0123 05 8000 FE900000 Duffffffa

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.

Realtek PCIe FE Family	- O General	🖲 VLAN	
	Diagnostics Statistics Cable Wake On LAN EEE Status About	VLAN ID Connection Name	Adapter Name
< <u> </u>		Add Delete	Modfy VID

Driver

This page displays driver information of the selected network adapter.

Realtek PCIe FE Family	😌 General	🖞 Driver	
	VLAN Dryse Advanced Setti Advanced Setti Statistics Statistics Wake On LAN EEE Status About	Description Provider Version Date INF Path Binary Path Comment	Reatek PCIe FE Family Controller Reatek 7.61.612.2012 6-12-2012 oem43.inf Rt64win7.sys This product is covered by one or more of the
		< [

Driver -> Advanced Setting

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

👺 Realtek PCIe FE Family		🖉 Advanced Setting	
	VLAN □ 凹 Driver 	The following properties are ava Click the property you want to c its value on the right.	ilable for this network adapter. hange on the left, and then select
	Bertand Barrier Diagnostics	Setting	Value
	Cable Cable Wake On LAN CEE Status CEE Status CEB About	ARP Officient Ehemet Foregy Efficient Ehemet How Control Interrupt Moderation IPV4 Checksum Officad Large Send Officad v2 (I Network Address NS Officad Prionty & VLAN Control & VLAN Control & VLAN	Enabled

TE100-ECFX / TE100-ECFXL

Diagnostics

This page performs hardware tests on selected network adapter.

Realtek PCIe FE Family	General	🟶 Diagnostics			
	Driver	Test Item	Pass	Fail	Repeat
	Advanced Setti	Register	0	0	L. ropour
	Diagnostics	EEPROM	0	0	
	Statistics	MAC Loopback	0	0	Start Test
	- 🕹 Cable	PHY Loopback	0	0	2.1
	- 🐼 Wake On LAN	IRQ.	0	0	
	About	FIFO	0	0	Stop lest
		12			*
					-

Diagnostics -> Send and Receive

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

Realtek PCIe FE Family	General	✓ Statistics	
	↓ VLAN ➡ Driver ➡ Diagnostics ➡ Statistics ➡ Cable ➡ Wake On LAN ➡ EEE Status ➡ About	Throughput(Send) Throughput(Receive) Throughput(Total) Packet Sent Packet Received Error(Send) Error(Receive)	592.00 bps 592.00 bps 1.16 Kbps 632 506 0 0

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.

Realtek PCIe FE Family	General	✓ Statistics			
< <u> </u>	Calle Statistics Cable Statistics About	Throughput(Send) Throughput(Receive) Throughput(Total) Packet Sent Packet Received Error(Send) Error(Receive)	592.00 bps 592.00 bps 1.16 Kbps 632 506 0 0		

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.

Realtek PCIe FE Family General S VLAN Driver Diriver Statistics Statistic	General VLAN VLAN Diagnostics Statistics Gable Wake On LAN	Cable *Cable *Cable Status Norma Open Short	Description: I - The calbe is n - The calbe is b - The cable is sh	ormal or connecte roken or disconne ort.	ed. icted.
		Link Speed:	100		
	EEE Status	Pair	Length(m)	Status	Refresh
	- Bout	1-2	0	Normal	
		3-6	0	Normal	
					-

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.

副師 Realtek PCIe FE Family	General VLAN ULAN Diagnostics Satistics Cable Cable EEE Status EEE Status About	Wake On LAN To wake up a computer in suspend or sleep mode on LAN, please select one of the following method and fill up the information about computer. Ethemet Address IP Addres I	
4 <u> </u>			Wake Up

EEE Status

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

Realtek PCIe FE Family	General VLAN Jorver Statistics Cable Wake On LAN EEE Status About	EEE Status TX LPI received RX LPI received XLPI indication RX LPI indication Local 1000Base-T EEE Local 100Base-TX EEE Link partner 1000Base-T EEE Link partner 100Base-TX EEE	Auto refresh Deassert LPI Current LPI Status Assert Wake Error Counter 0	
		Energy Efficient Ethemet (EEE) is a series the twisted-pair and backplane ethemet n that allow for less power consumption duri utilization.	of enhancements to etworking standards ng periods of low link	*

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 μ m up to 550m or 62.5/125 μ m 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

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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 diver 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. $50/125 \ \mu m$ up to 550m $62.5/125 \ \mu m$ up to 2km

TE100-ECFX / TE100-ECFXL

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.

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Product Warranty Registration

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