# TP-LINK®

# **User Guide**

# TF-3239DL 10/100Mbps PCI Network Adapter



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#### **FCC STATEMENT**

FC

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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not Expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# CE Mark Warning

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

#### **DECLARATION OF CONFORMITY**

For the following equipment:

Product Description: 10/100Mbps PCI Network Adapter

Model No.: TF-3239DL

Trademark: TP-LINK

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 2004 / 108 / EC, Directives 2006 / 95 / EC

The above product is in conformity with the following standards or other normative documents

EN 55022:2006+A1:2007

EN 55024:1998+A1:2001+A2:2003

EN 61000-3-2:2006+A1:2009+A2:2009

EN 61000-3-3:2008

EN 60950-1:2006+A11:2009+A1:2010

The product carries the CE Mark



Person is responsible for marking this declaration:

Yang Hongliang Product Manager of International Business

Date of Issue:2012

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# **Package Contents**

The following contents should be found in your box:

- > One TF-3239DL 10/100Mbps PCI Network Adapter
- > Quick Installation Guide
- > One Resource CD for TF-3239DL, including:
  - Drivers
  - User Guide
  - Other Helpful Information

#### P Note:

Make sure that the package contains the above items. If any of the listed items is damaged or missing, please contact your distributor.

#### Conventions

The "Adapter" mentioned in this user guide stands for TF-3239DL 10/100Mbps PCI Network Adapter without any explanations.

### Chapter 1. Introduction

#### **1.1** Overview of the product

The TF-3239DL is highly integrated and cost-effective single-chip Fast Ethernet Adapter that provides 32-bit performance, PCI bus master capability, and full compliance with IEEE 802.3u 100Base-TX specifications and IEEE 802.3x Full Duplex Flow Control. It also supports ACPI, PCI power management for modern operating systems that is capable of Operating System Directed Power Management (OSPM) to achieve the most efficient power management. The TF-3239DL keeps network maintenance cost low and eliminates usage barriers. It is the easiest way to upgrade a network from 10 to 100Mbps. The product is highly integrated and requires no "glue" logic or external memory.

The TF-3239DL also supports full-duplex operation, making possible 100Mbps of bandwidth at no additional cost. It supports both 10Mbps and 100Mbps network speed, 100Base-TX operated on twisted pairs of Category 5 UTP and 10Base-T operate on Category 3, 4, 5 UTP. The TF-3239DL uses Auto-Negotiation technology to detect the network speed.

Whatever your requirements are ease of installation, superior performance, or responsive support backed up by unlimited technical support, the Product is the superior choice.

#### 1.2 Features

- > Integrated Ethernet MAC, Physical chip and transceiver in one chip
- Compliant to PCI Revision 2.1/2.2
- > PCI local bus single-chip Ethernet controller
- Supports PCI clock 16.75MHz-40MHz
- Supports a 32-bit general-purpose timer, referenced by the external PCI clock source, and timer-interrupt
- > Includes a programmable, PCI burst size and early Tx/Rx threshold
- Supports PCI target fast back-to-back transaction
- > Supports digital and analog loopback capability on both ports
- Supports ACPI, PCI power management
- Complies with the IEEE802.3u Fast Ethernet, 100Base-TX standard and IEEE802.3 CSMA/CD 10Base-T standard
- Supports Full Duplex Flow Control (IEEE 802.3x)
- > Full duplex design to double the performance

- Supports Auto-Negotiation function
- Auto-setups IRQ and I/O address
- > Contains two large (2Kbyte) independent receive and transmit FIFOs
- > One STP/UTP connector for 10Mbps or 100Mbps network Speed
- > Provides diagnostic software and one LED to indicate network Link/activity
- Supports Drivers for Linux-2.4.x, Windows 7 (32bit / 64bit), Windows Vista (32bit / 64bit), Windows 2000 and Windows XP

#### 1.3 LED Status

A red LED indicates if the 10 or 100Mbps STP/UTP has been link OK or not and is working or not. When the light is OFF, it indicates that the STP/UTP port has not been connected or link not OK; When the light is ON, it indicates that the STP/UTP port link OK. When the light is BLINKING, it indicates that the STP/UTP port is receiving data or transmitting data.

# Chapter 2. Installation Guide

#### 2.1 Hardware Installation

To install the adapter, please follow these steps listed below:

- 1. Turn off your computer and unplug the power cord and all cables.
- 2. Remove your computer's case cover.
- 3. Locate an available PCI slot.
- 4. Remove the screw that secures the back plate (the small piece of metal that covers the opening for PCI card on the back panel of your computer), then remove the back plate.
- 5. Carefully insert the adapter into the PCI slot. Do not touch the metal connector on the adapter.
- 6. Secure the adapter to the case using the screw you removed from the back plate.
- 7. Reinstall your computer's case cover.
- 8. Plug in the power cord and other cables, and then turn on your computer.

#### Note:

When the hardware has been successfully installed on your computer, you will be prompted 'Found New Hardware Wizard' (as shown in Figure 2-1 and Figure 2-2); please click Cancel, and then follow the Software Installation steps to install driver for your adapter.

Found New Hardware Wizard					
Welcome to the Found New Hardware Wizard					
	This wizard helps you install software for:				
	Realtek RTL 8139/810x Family Fast Ethernet NIC				
	If your hardware came with an installation CD or floppy disk, insert it now.				
	What do you want the wizard to do?				
	<ul> <li>Install the software automatically (Recommended)</li> </ul>				
	Install from a list or specific location (Advanced)				
	Click Next to continue.				
	< Back Next > Cancel				

Figure 2-1 Found New Hardware Wizard in Windows XP



Figure 2-2 Found New Hardware Wizard in Windows Vista

#### 2.2 Software Installation

The section will guide you through the installation procedures for Windows XP, Windows 7, and Windows Vista. Please carefully follow the steps.

#### 2.2.1 For Windows XP

- 1. Insert the TP-LINK Resource CD into the CD-ROM drive.
- 2. Right-click the icon **My Computer** on the desktop, and then click **Manage**.

My Compute	r
🧐 My Networl	<b>Open</b> Explore Search Manage
Places	Map Network Drive Disconnect Network Drive
Recycle Bir	Create Shortcut Delete Rename
	Properties



3. The Computer Management screen will appear as shown in Figure 2-4. Click Device Manager, and then you will see the various options on the right. Click Network adapters, and then from the drop-down list please find the new network adapter Realtek RTL 8139/810x Family Fast Ethernet NIC you have installed. Right-click it, and then select Update Driver....



Figure 2-4

 The Hardware Update Wizard window will show up as shown in Figure 2-5. Select Install from a list or specific location [Advanced], and then click Next.



Figure 2-5

5. Select Don't search. I will choose the driver to install, and then click Next.

Hardware Update Wizard					
Please choose your search and installation options.					
Search for the best driver in these locations.					
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.					
Search removable media (floppy, CD-ROM)					
Include this location in the search:					
C:\Documents and Settings\English\Desktop\11053 👽 Browse					
⊙ Don't search. I will choose the driver to install.					
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.					
< Back Next > Cancel					

Figure 2-6

6. Click Have Disk....

Hardware Update Wizard
Select Network Adapter Which network adapter do you want to install?
Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this component, click Have Disk.
Show compatible hardware
Network Adapter:
Realtek RTL 8139/810x Family Fast Ethernet NIC
This driver is digitally signed. <u>Tell me why driver signing is important</u>
< Back Next > Cancel

Figure 2-7

7. Click Browse....



Figure 2-8

8. Find the right product model (**TF-3239DL**) and operation system (**Windows XP**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

Locate File							? 🛛
Look in:	눹 Windows XP_	2000	<b>v</b> (	3 💋	i 🖻 🛛	•	
My Recent Documents Desktop	NetrtOEM.inf			-			
My Documents							
My Computer							
	File name:	NetrtOEM.inf			*		Open
My Network	Files of type:	Setup Information (*.inf)			~		Cancel

Figure 2-9

9. Back to the Install From Disk screen, click OK.



Figure 2-10

10. Click Next.

Hardware Update Wizard
Select Network Adapter Which network adapter do you want to install?
Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this component, click Have Disk.
Show compatible hardware
Network Adapter:
TP-LINK 10/100Mbps PCI Network Adapter
This driver is not digitally signed!     Have Disk Have Disk
< Back Next > Cancel

Figure 2-11

11. The Hardware Installation screen will pop up as shown in Figure 2-12; select Continue Anyway.

Hardware Installation						
1	The software you are installing for this hardware: TP-LINK 10/100Mbps PCI Network Adapter has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.					
	Continue Anyway STOP Installation					

Figure 2-12

12. Wait a few seconds for the installation.

Hardware Update Wizard					
Please wait	while the wizard installs the software				
<b>H</b>	TP-LINK 10/100Mbps PCI Network Adapter				
	ipfnd51.sys To C:WINDOWS\system32\DRIVERS				
	< Back Next > Cancel				

Figure 2-13

13. Click **Finish** to complete the installation.



Figure 2-14

#### 2.2.2 For Windows 7

- 1. Insert the TP-LINK Resource CD into the CD-ROM drive.
- 2. Right-click the icon Computer on the desktop, and then click Manage.



Figure 2-15

3. The Computer Management screen will appear as shown in Figure 2-16. Click Device Manager, and then you will see the various options on the right. Click Network adapters, and then from the drop-down list please find the new network adapter Realtek RTL 8139/810x Family Fast Ethernet NIC you have installed. Right-click it, and then select Update Driver Software....



Figure 2-16

4. The next screen will appear as shown in Figure 2-17. Select **Browse my computer for driver software**.



Figure 2-17

5. Select Let me pick from a list of device drivers on my computer, and then click Next.

		×
$\bigcirc$	Update Driver Software - Realtek RTL 8139/810x Family Fast Ethernet NIC	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	C:\Users\english\Documents	
	✓ Include subfolders	
	Let me pick from a list of device drivers on my computer This list will show installed driver of the wild be device and all driver	
	This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next	ancel

Figure 2-18

6. Click **Have Disk...** in the screen as shown in Figure 2-19.

			×
$\bigcirc$	👖 Up	pdate Driver Software - Realtek RTL 8139/810x Family Fast Ethernet NIC	
	Selec	ct Network Adapter Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this feature, click Have Disk.	
	V Sho	ow compatible hardware	
	Netw	vork Adapter:	
	🗐 R	Realtek RTL 8139/810x Family Fast Ethernet NIC	_
	5	Realtek RTL 8139/810x Family Fast Ethernet NIC	
	🛒 Т	This driver is digitally signed. Have Disk	
		Fell me why driver signing is important	
	-		
		Next Cano	:el

Figure 2-19

7. Click **Browse...** in the **Install From Disk** window as shown in Figure 2-20.

Install Fro	×	
-	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel
	Copy manufacturer's files from:	Browse

Figure 2-20

8. Find the right product model (**TF-3239DL**) and operation system (**Windows 7**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

🛃 Locate File				<b>X</b>
Look in:	🕕 Windowns 73	32bit 👻	G 🌶 🖻 🛄 -	
(Es	Name	*	Date modified	Туре
Recent Places	Netrtl32.inf		6/12/2010 6:01 PM	Setup Infc
Desktop				
Libraries				
Computer				
	4			
Network	File name:	Netrtl32.inf	- [	Open
	Files of type:	Setup Information (*.inf)	<b>_</b>	Cancel

Figure 2-21

9. Back to the Install From Disk window as shown in Figure 2-22, click OK.



Figure 2-22

10. Click Yes in the Update Driver Warning window to continue the installation.



Figure 2-23

11. Click Next in the next screen as shown in Figure 2-24.

_			×
$\bigcirc$	<u>n</u> U	Update Driver Software - Realtek RTL 8139/810x Family Fast Ethernet NIC	
	Sele	Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this feature, click Have Disk.	
	Net	twork Adapter:	
	ſ	TP-LINK 10/100Mbps PCI Network Adapter	
	_	This driver is not digitally signed!     Have Disk       Tell me why driver signing is important     Have Disk	
		Next Cance	el 🛛

Figure 2-24

12. Select **Install this driver software anyway** in the **Windows Security** window as shown in Figure 2-25.



Figure 2-25

13. Wait a few seconds for the installation.

	Σ	x
$\bigcirc$	Update Driver Software - Realtek RTL 8139/810x Family Fast Ethernet NIC	
1	installing driver software	

Figure 2-26

14. Click **Close** to complete the installation.



Figure 2-27

15. Click **Yes** in the **System Settings Change** window (as shown in Figure 2-28) to restart the computer, so that the installation will take effect.



Figure 2-28

#### 2.2.3 For Windows Vista

- 1. Insert the TP-LINK Resource CD into the CD-ROM drive.
- 2. Right-click the icon **Computer** on the desktop, and then click **Manage**.





3. The Computer Management screen will appear as shown in Figure 2-30. Click Device Manager, and then you will see the various options on the right. Click Network adapters, and then from the drop-down list please find the new network adapter Realtek RTL 8139/810x Family Fast Ethernet NIC you have installed. Right-click it, and then select Update Driver Software....



Figure 2-30

4. The next screen will appear as shown in Figure 2-31. Select **Browse my computer for** driver software.



Figure 2-31

5. Select Let me pick from a list of device drivers on my computer, and then click Next.

	×
😋 🧵 Update Driver Software - Realtek RTL 8139/810x Family Fast Ethernet NIC	
Browse for driver software on your computer	
Search for driver software in this location:	
C:\Users\english\Desktop Browse	
Include subfolders	
Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all	
driver software in the same category as the device.	
Next Cano	el

Figure 2-32

6. Click Have Disk... in the screen as shown in Figure 2-33.



Figure 2-33

7. Click Browse... in the Install From Disk window as shown in Figure 2-34.



Figure 2-34

8. Find the right product model (**TF-3239DL**) and operation system (**Windows Vista**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

🛓 Locate File							
Look in:	👢 Windows Vi	sta 32bit		•	G 🤌 📂	▼	
Recent Places Desktop Desktop english Computer	Name NetrtOEM.ir	Date modif f	Type	Size			
Network	File name: Files of type:	NetrtOEM.i	nf mation (*.inf)			<b>v</b>	Open Cancel

Figure 2-35

9. Back to the Install From Disk window as shown in Figure 2-36, click OK.



Figure 2-36

10. Click **Yes** in the **Update Driver Warning** window to continue the installation.



Figure 2-37

11. Click **Next** in the next screen as shown in Figure 2-24.

			<b>×</b>
$\bigcirc$	IJ	Update Driver Software - Realtek RTL 8139/810x Family Fast Ethe	ernet NIC
	Sele	Click the Network Adapter that matches your hardware, then click OK. If disk for this feature, click Have Disk.	you have an installation
	🗸 Sh	ow compatible hardware	
		vork Adapter: TP-LINK 10/100Mbps PCI Network Adapter	
	( )	This driver is not digitally signed! Tell me why driver signing is important	Have Disk
			Next Cancel

Figure 2-38

12. Select **Install this driver software anyway** in the **Windows Security** window as shown in Figure 2-39.



Figure 2-39

13. Wait a few seconds for the installation.



Figure 2-40

14. Click **Close** to complete the installation.



Figure 2-41

15. Click **Yes** in the **System Settings Change** window (as shown in Figure 2-42) to restart the computer, so that the installation will take effect.



Figure 2-42

# **Appendix A: Specifications**

Normal				
Interface	32-bit PCI interface			
Standards	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX			
Software	Drivers for Linux-2.4.x, Windows 7 (32bit / 64bit), Windows Vista (32bit / 64bit), Windows 2000, Windows XP			
Transmission Rate	10/100Mbps			
Hardware	IBM PC compatibles(it must have PCI slot)			
Connector Supported	RJ45			
IRQ Line	Assigned by system			
I/O Address	Assigned by system			

Environmental and Physical		
Temperature	0°C ~ 40°C (Operating)	
Humidity	5% ~ 95%, Non-condensing	
Power consumption	1W (Max)	

# **Appendix B: Troubleshooting**

#### 1. What should I do if PC cannot find the new hardware?

Check to see if the network adapter is inserted in the PCI slot properly; otherwise, please reinsert the adapter.

If the problem remains, please try to change another PCI slot.

#### 2. What should I do if PC cannot identify the new hardware?

If you couldn't find the network adapter you've installed by going to "(My) Computer > Manager > Device Manager > Network Adapter >..."; please go to "(My) Computer > Manager > Device Manager > Other devices > Ethernet Controller", and then follow the rest steps of software installation to update driver.

