User Manual

USB 2.0 10/100 Fast Ethernet Adapter

DUB-E100

Manual Overview

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes. Information in this document may become obsolete as our services and websites develop and change. Please refer to the www.mydlink.com website for the most current information.

Trademarks

D-Link and the D-Link logo are trademarks or registered trademarks of D-Link Corporation or its subsidiaries in the United States or other countries. All other company or product names mentioned herein are trademarks or registered trademarks of their respective companies.

Copyright © 2012 by D-Link Corporation.

Table of Contents

Package Contents

- DUB-E100 USB 2.0 10/100 Fast Ethernet Adapter
- DUB-E100 Drivers and Manual on CD-ROM
- Quick Installation Guide

If any of the above items are missing or damaged, please contact your reseller.

System Requirements

System Requirements	**Computer with the following:** • Microsoft Windows® 7/Vista®/XP/2000, Linux, or Mac OS X 10.4/10.5 • Pentium 2.0 GHz or higher with a minimum of 32 MB RAM • Available USB port • CD-ROM drive

Introduction

Thank you for choosing the D-Link DUB-E100 USB 2.0 10/100 Fast Ethernet Adapter. The DUB-E100 USB 2.0 10/100 Mbps Fast Ethernet Adapter is specifically designed to plug into an available Universal Serial Bus (USB) port on a desktop or laptop PC running Microsoft Windows 7/Vista/XP/2000, Mac OS X, or Linux. Based on USB 2.0, the DUB-E100 extends the transfer speed of earlier USB Fast Ethernet adapters to true 10/100 Mbps connectivity. Power for the DUB-E100 is provided directly by the USB bus, eliminating the need for an external power adapter. It also supports USB energy-saving suspend and resume functions to minimize power consumption, which is especially useful for laptop/notebook users.

Features

Designed for versatility and performance, the DUB-E100 USB 2.0 10/100 Fast Ethernet Adapter provides the following:
- Compliant with USB 2.0 and USB 1.1 specifications
- True 10/100 Mbps network connectivity
- Compliance with IEEE 802.3u Fast Ethernet standards and IEEE 802.3 Ethernet standards
- Plug-and-Play installation
- Auto 10/100 Mbps speed detection
- Supports half and full-duplex at 10 Mbps, half and full-duplex at 100 Mbps
- One built-in RJ-45 connector
- Auto-negotiation to the highest available speed
- Two LED indicators: Link, TX/RX
- Driver support:
  - Microsoft Windows 7 (x86, x64)
  - Microsoft Windows Vista (x86, x64)
  - Microsoft Windows XP (x86/x64 Edition)
  - Linux (kernel 2.6.14 & above)
  - Macintosh OS X (10.4, 10.5)
  - Microsoft Windows 2000

Hardware Overview

USB Connector

Ethernet Port

COMPONENT	DESCRIPTION
Ethernet Port	Plug an Ethernet cable from a switch, hub, or router into this port.
USB Connector	Plug this connector into a USB port on your PC.

Software Installation

Insert the DUB-E100 CD into your computer's DVD or CD drive, then proceed to the appropriate installation section on the following pages for your operating system.

Note: If the user interface does not start up, please go to the Autorun folder in your PC's CD drive and open Autorun manually.
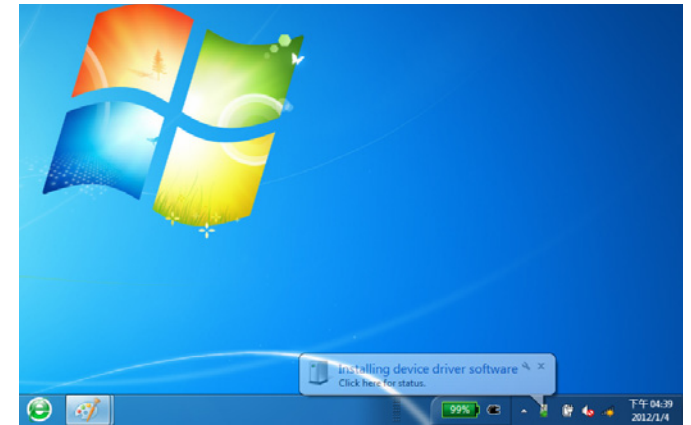
Windows 7

After you put the CD into the CD drive, the DUB-E100 user interface menu screen will appear. Click on **Install** to begin the DUB-E100 driver installation. The InstallShield Wizard will then pop up and run automatically.
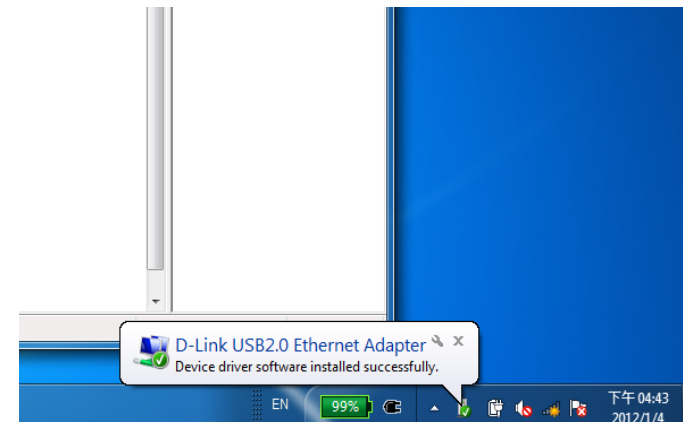
Note: The DUB-E100 user interface may differ in appearance for different regions.

When the InstallShield Wizard is completed, plug the DUB-E100 into your PC and the driver software installation will be completed automatically.

When the Windows 7 driver installation is complete, please then proceed to **Connecting the Adapter to a Network** on page 14.
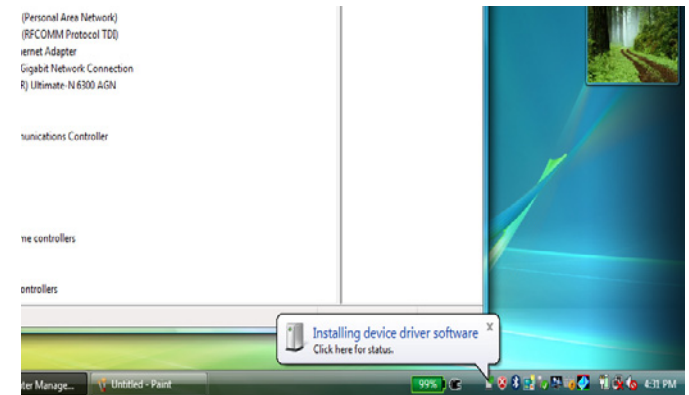
Windows Vista

After you put the CD into the CD drive, the DUB-E100 user interface menu screen will appear. Click on **Install** to begin the DUB-E100 driver installation. The InstallShield Wizard will then pop up.

Note: The DUB-E100 user interface may differ in appearance for different regions.

Plug the DUB-E100 into your PC and the driver software installation will be completed automatically.

When the Windows Vista driver installation is complete, you can connect the DUB-E100 to a USB port on your computer. Please then proceed to **Connecting the Adapter to a Network** on page 14.
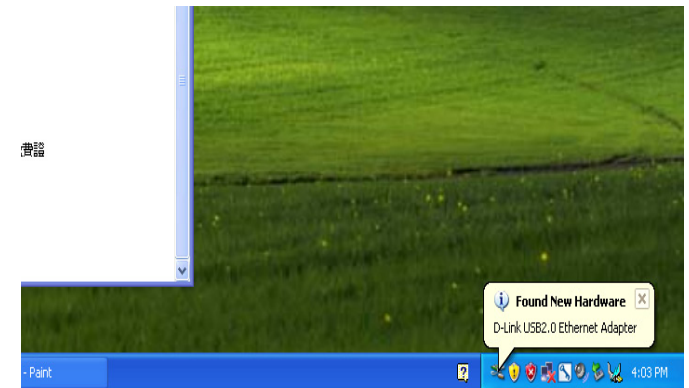
Windows XP

After you put the CD into the CD drive, the DUB-E100 user interface menu screen will appear. Click on **Install** to begin the DUB-E100 driver installation. The InstallShield Wizard will then pop up.

Note: The DUB-E100 user interface may differ in appearance for different regions.
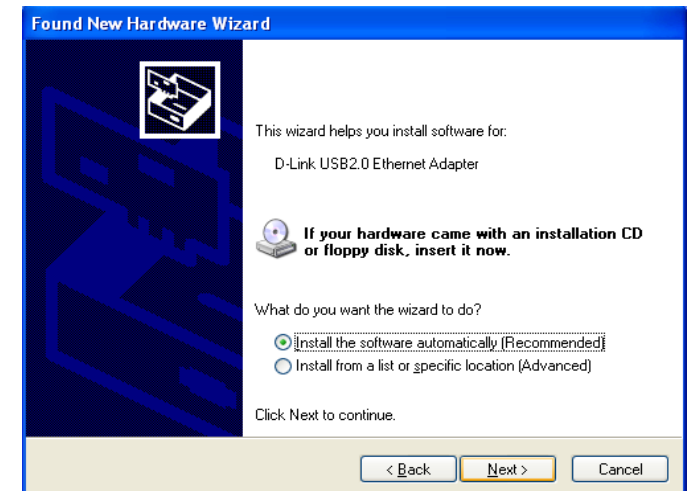
Plug the DUB-E100 into your PC.

The Found New Hardware box will appear. Select **Yes, this time only** and click **Next** to continue.

Choose **Install the software automatically** and click **Next** to continue.

When the Windows XP driver installation is complete, you can connect the DUB-E100 to a USB port on your computer. Please then proceed to **Connecting the Adapter to a Network** on page 14.
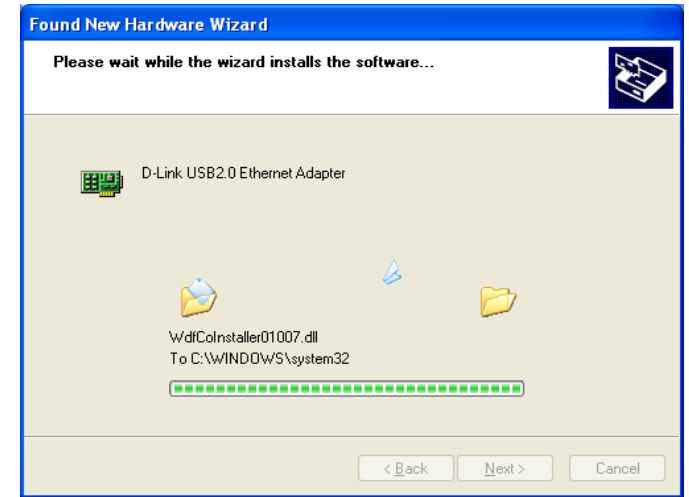
Mac OS X

The following screenshots were taken from Mac OS X 10.5, but the steps are similar in other versions of OS X. Your operating system must be version 10.4 or above.

Please insert the DUB-E100 CD into your computer's DVD or CD drive, then go to the DUB-E100 folder and navigate to \Drivers\MAC.
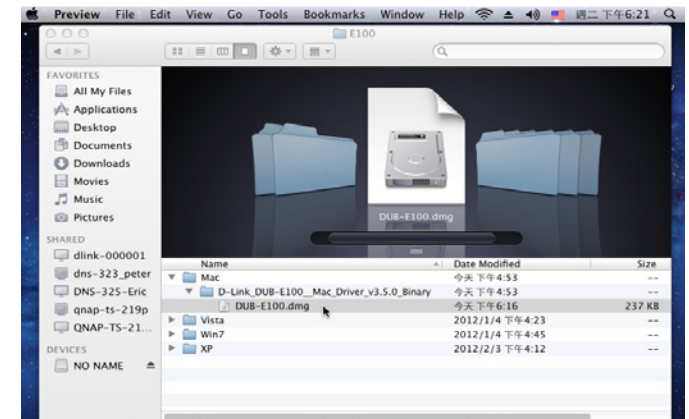
Double-click **DUB-E100_v3.5.0**.
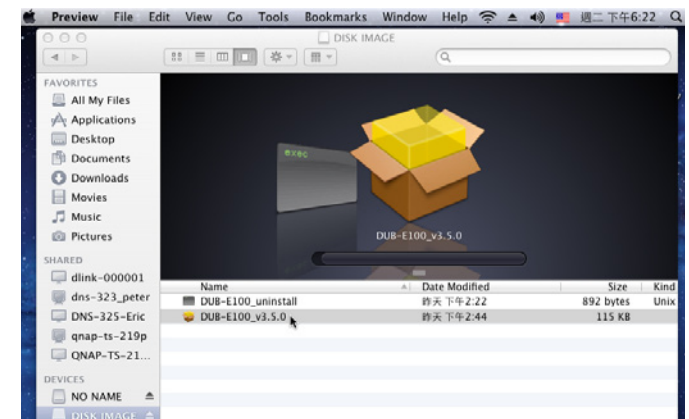
Click **Continue**.

Click **Install** to perform a standard installation. If you wish to change the drive where the installation will take place, click **Change Install Location**.
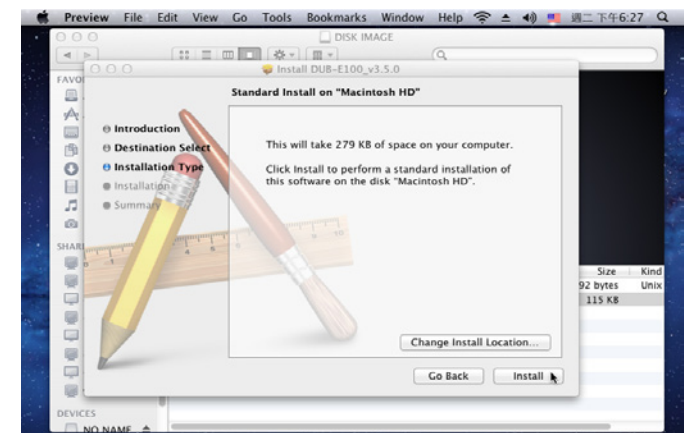
If you clicked **Change Install Location**, you will see the Destination Select screen. Select a **Destination Volume**, then click **Continue**.
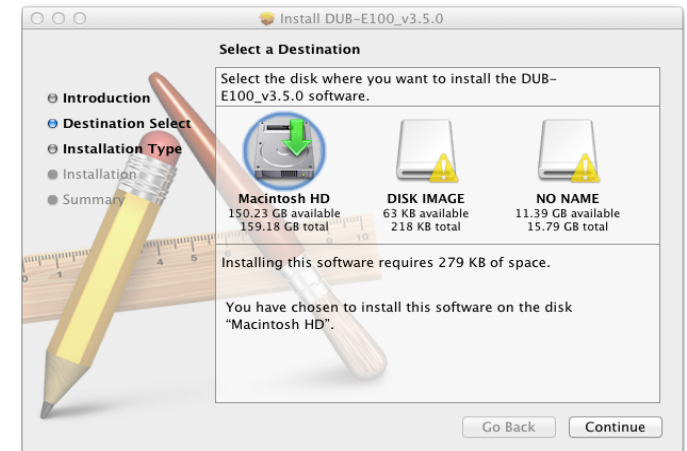
Enter the name and password of a user with administrative rights. Click **OK**.

Click **Continue Installation**. The computer will then restart itself after the installation is complete. Please then proceed to **Connecting the Adapter to a Network** on page 14.
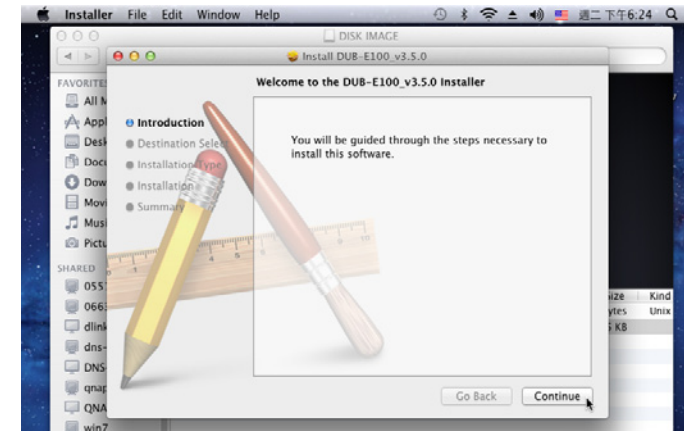
Linux 2.6.14

This driver is designed for Kernel 2.6.14.x or above. To compile the provided Linux driver, you need the Linux 2.6 Kernel source. Also, please make sure the kernel is built with "Support for Host-side, EHCI, OHCI, and UHCI" option. Please follow these steps.

    1. Insert the CD into the CD drive of your computer and go to the Drivers\Linux\ directory.
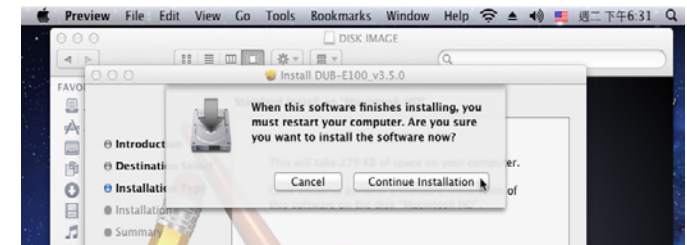   2. Copy the LINUX2.6.14_REV101 folder to your temporary directory.
    3. Go to the LINUX2.6.14_REV101 folder and execute the following command to compile the driver.
       [root@localhost linux2.6.14_rev101]# make
    4. If compiling without errors, asix.ko will be created under the current directory.
    5. If you want to use modprobe command to mount the driver, execute the following command to install the driver
       on your Linux.
[root@localhost linux2.6.14_rev101]# make install
To mount the driver, go to the LINUX2.6.14_REV101 directory and executing the following command:
[root@localhost linux2.6.14_rev101]# insmod usbnet
[root@localhost linux2.6.14_rev101]# insmod asix.ko
or
[root@localhost anywhere]# modprobe asix
To unmount the driver, just typing the following command:
[root@localhost anywhere]# rmmod asix
[root@localhost anywhere]# rmmod usbnet

Please then proceed to **Connecting the Adapter to a Network** on page 14.

Connecting the Adapter to a Network

Attach an Ethernet cable to the Ethernet port on the DUB-E100.

Attach the other end of the Ethernet cable to your network switch, hub, or router.

Completing the Installation

When the installation of the DUB-E100 is complete, the Speed LED will illuminate solid green when the DUB-E100 is connected to a 100 Mbps network and remains off when connected to a 10 Mbps network. The Tx/Rx LED will flash amber when data is being transmitted or received. If both LEDs are unlit, there may be a problem with the physical connection. Check the cables between your DUB-E100 and your switch or router. Verify that your network switch or router is powered on.

Speed LED
Lights solid green when the network connection is at 100 Mbps and remains off when connected to a 10 Mbps network.

TX/RX LED
Flashes amber when data is being transmitted or received.
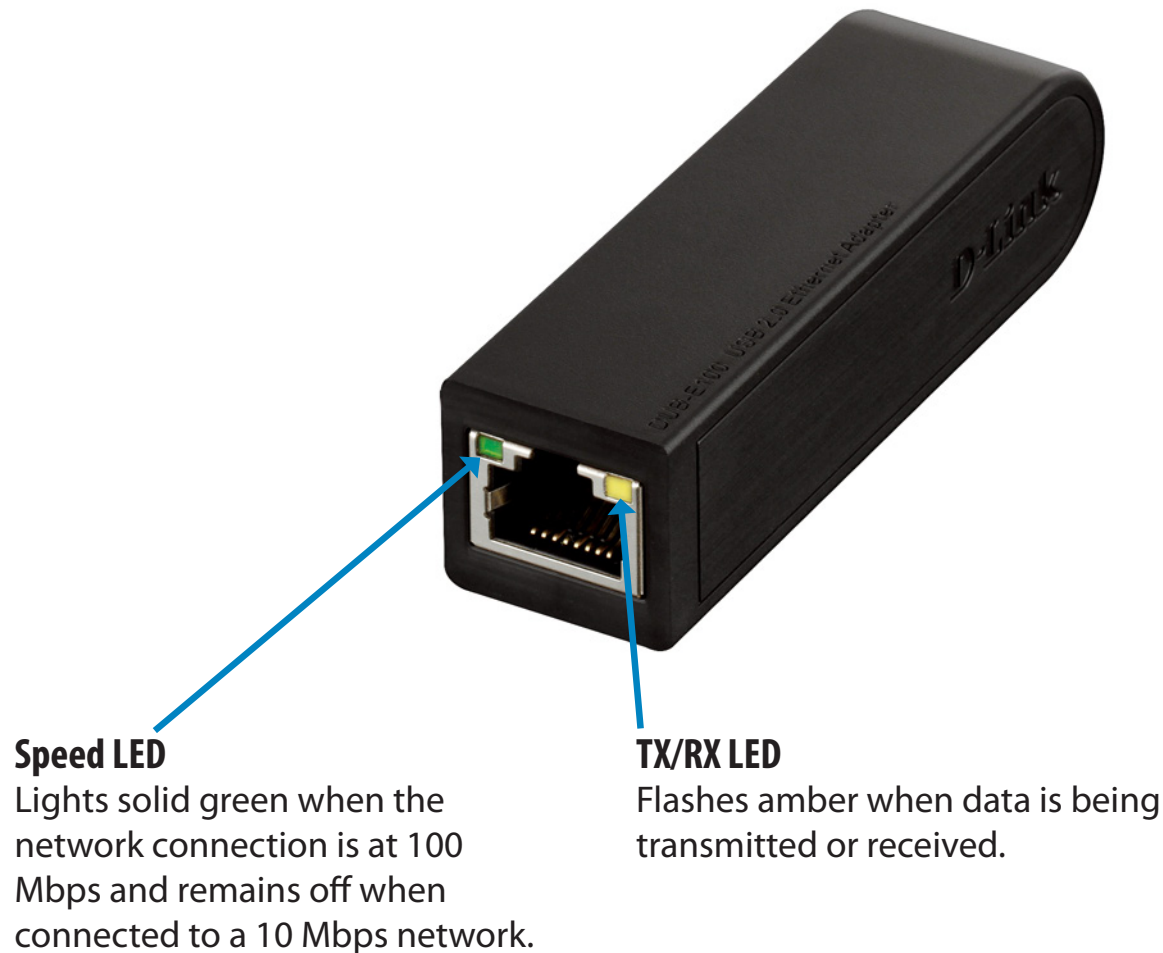
Troubleshooting

Do I need to use a crossover cable or straight-through cable?

With most of D-Link's switches/routers, the Ethernet ports are Auto MDI-II/MDI-X. This means the port will auto-sense the cable type. Auto MDI-II/MDI-X ports may react differently if the Ethernet cable is not properly pinned. If you make your own cables, it is very important that they follow the industry standard pin-out (568A and 568B).

Computer connections to a hub, switch, or router typically use a straight-through cable. When connecting a computer to another computer or to an uplink port then a cross-over cable is typically required. Rule of Thumb: "If there is a link light, the cable is right."

How do I verify that my DUB-E100 is properly installed?

Windows

You can verify that the adapter has been properly installed in Device Manager by following these steps:
- Right-click on the My Computer icon and select Properties.
- For Windows XP, 2000, and Server 2003: Go to the Hardware tab and click on the Device Manager button
- For Windows Vista: Click on the Device Manager item under the Tasks group.
- Expand the Network Adapters heading by clicking on the plus (+) sign next to Network Adapters.
- Right-click on the My Computer icon and select Properties.
- The D-Link USB DUB-E100 should appear with a green and gold network adapter symbol.
  If the D-Link USB DUB-E100 in Device Manager appears with a bright yellow exclamation mark or a red x, please contact D-Link Technical Support.

Mac

- Click the Apple icon on the task bar, select System Preferences, and then click the Network icon.
- You will find that a new Ethernet network interface is available. It is usually named Ethernet Adapter (en1) or Ethernet Adapter (en2).

Linux 2.6.x

To verify if the DUB-E100 driver is properly installed:

- Load the DUB-E100 module by the following command:

  [root@localhost linux2.6.14_rev101]# modprobe asix

- List the loaded modules with the specified pattern "asix":

  [root@localhost linux2.6.14_rev101]# lsmod | grep asix

  Then you should get the reply similar to the following lines:

  asix   26880 0

  usbnet   20616 1 asix

  mii   9600 2 asix,e100

  usbcore 114896 5 asix,usbnet,usb_storage,echi_hcd,uhci_hcd

If you still have a problem installing the D-Link DUB-E100 USB driver, please contact D-Link Technical Support.

Technical Specifications

Firmware Specifications

OS
+ Microsoft Windows 7/Vista/XP/2000
+ Mac OS X 10.4/10.5
+ Linux

Hardware Specifications

PACKAGE CONTENTS
+ DUB-E100 USB 2.0 Fast Ethernet Adapter
+ Quick Installation Guide
+ CD-ROM with:
 - Drivers
 - Manual

STANDARDS
+ USB Specification Version 2.0
+ USB Specification Version 1.1
+ USB Specification Version 1.0
+ OHCI (Open Host Controller Interface)
+ EHCI (Enhanced Host Controller Interface)
+ IEEE 802.3 Ethernet
+ IEEE 802.3u 100BASE-T, TX and T4 compatible
+ Supports suspended mode and remote wakeup
+ Supports full and half duplex in Fast Ethernet

PORTS/CONNECTORS
+ USB Type A
+ RJ-45 (10/100 Mbps Dual-Speed)

DIAGNOSTIC LEDS
+ Speed
+ Tx/Rx Traffic

POWER
+ Bus powered 2.5 W, 0.5 A@5 V DC

DIMENSIONS (W x D x H)
+ 73 x 21.3 x 20 mm (2.87 x 0.84 x 0.79 inches)

WEIGHT
+ 22 g (0.05 pounds)

OPERATING TEMPERATURE
+ Operating: 0 ˚ to 40 ˚C (32 ˚ to 104 ˚F)
+ Storage: -10 ˚ to 70 ˚C (14 ˚ to 158 ˚F)

HUMIDITY
+ Operating: 5% to 95% (non-condensing)
+ Non-operating: 0% to 95% (non-condensing)

CERTIFICATIONS
+ CE
+ C-Tick
+ FCC