

EEC1020

Ethernet Extension Card

Version 2.00

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User's Guide

ZyXEL

TOTAL INTERNET ACCESS SOLUTION

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Interference Statements and Warnings

FCC

Interference Statement:

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 operations.

FCC Warning!

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Mark Warning:

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

Taiwanese BSMI A Warning:

警告使用者
這是甲類的資訊產品, 在居住的環境使用時,
可能會造成射頻干擾, 在這種情況下,
使用者會被要求採取某些適當的對策。

Certifications

Refer to the product page at www.zyxel.com.

ZyXEL Limited Warranty

ZyXEL warrants to the original end user (purchaser) that this product is free from any defects in materials or workmanship for a period of up to two years from the date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, ZyXEL will, at its discretion, repair or replace the defective products or components without charge for either parts or labor, and to whatever extent it shall deem necessary to restore the product or components to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be solely at the discretion of ZyXEL. This warranty shall not apply if the product is modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions.

Note

Repair or replacement, as provided under this warranty, is the exclusive remedy of the purchaser. This warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular use or purpose. ZyXEL shall in no event be held liable for indirect or consequential damages of any kind of character to the purchaser.

To obtain the services of this warranty, contact ZyXEL's Service Center for your Return Material Authorization number (RMA). Products must be returned Postage Prepaid. It is recommended that the unit be insured when shipped. Any returned products without proof of purchase or those with an out-dated warranty will be repaired or replaced (at the discretion of ZyXEL) and the customer will be billed for parts and labor. ZyXEL will ship all repaired or replaced products to the corresponding return address, Postage Paid. This warranty gives you specific legal rights, and you may also have other rights that vary from country to country.

Customer Support

Please have the following information ready when you contact customer support.

- Product model and serial number.
- Warranty information.
- Date that you received your device.
- Brief description of the problem and the steps you took to solve it.

| METHOD | E-MAIL SUPPORT/SALES | TELEPHONE/FAX | WEB SITE/ FTP SITE | REGULAR MAIL |
|---------------|--|--|---|---|
| LOCATION | | | | |
| WORLDWIDE | support@zyxel.com.tw sales@zyxel.com.tw | +886-3-578-3942 +886-3-578-2439 | www.zyxel.com www.europe.zyxel.com ftp.europe.zyxel.com | ZyXEL Communications Corp., 6 Innovation Road II, Science- Based Industrial Park, Hsinchu 300, Taiwan. |
| NORTH AMERICA | support@zyxel.com sales@zyxel.com | +1-714-632-0882 800-255-4101 +1-714-632-0858 | www.zyxel.com ftp.zyxel.com | ZyXEL Communications Inc., 1650 Miraloma Avenue, Placentia, CA 92870, U.S.A. |
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Preface

Congratulations on your purchase of the EEC1020 Ethernet Extension Card.

About this User's Manual

This user's guide gives hardware specifications and explains how to connect the Ethernet extension card.

Online Registration

Register your ZyXEL product online at www.zyxel.com for free future product updates and information.

Naming Conventions

- The EEC1020 (Ethernet Extension Card) may be referred to as the EEC or the card.
- The IES-2000 or IES-3000 may be referred to as the IES.

Related Documentation

- IES-2000 or IES-3000 User's Guide

Refer to the IES-2000 or IES-3000 User's Guide for directions on installation, hardware trouble shooting and safety warnings.

- DSL Line Card User's Guides

These user's guides provide hardware connection details and explain how to configure and manage the individual line cards.

- Glossary and ZyXEL Web Site

Please refer to www.zyxel.com for an online glossary of networking terms or the ZyXEL download library for additional support documentation.

Chapter 1

EEC1020 Overview

This chapter introduces the Ethernet extension card's general features, hardware and connections.

1.1 EEC1020 Overview

The EEC1020 (Ethernet Extension Card) is for applications with an available layer two Ethernet switch for managing the DSL line cards and providing an uplink connection. The EEC1020 is perfect for ISPs or large building applications seeking to provide high bandwidth broadband services to subscribers while minimizing costs.

The EEC provides an Ethernet port for each DSL line card. The EEC1020's Ethernet ports allow you to make an uplink connection for each DSL line card. The Ethernet extension card allows you to use a layer two Ethernet switch to connect to each DSL line card via Ethernet for configuration and maintenance.

Install the Ethernet extension card in the IES- (Integrated Ethernet Switch) 2000 or IES-3000 main chassis. Use this chapter's connection descriptions along with the directions and safety warnings in the *IES-2000* or *IES-3000 User's Guide* to install the Ethernet extension card and make the necessary connections.

1.2 Front Panel



1.3 Weight

EEC1020: 1.2 kg

1.4 Connections

The EEC1020 has 20 100Base-TX connectors.

Use 100m or shorter lengths of 2 pair UTP Cat. 5 Ethernet cable, to connect a layer two Ethernet to the EEC1020's 100Base-TX connectors for uplink and management connections.

1.4.1 Connections with the IES-2000

When you use the Ethernet extension card with the IES-2000, use the upper set of connector labels. They are labeled **2-1** to **6-4** from right to left. There are no connectors labeled for slot 1 since the EEC1020 itself goes in slot 1.

Connecting to an ALC1024 or SLC1024

Use connector **2-1** to connect to an ALC1024 or SLC1024 in slot 2. Use connectors **3-1**, **4-1** and **5-1** in the same manner with ALC1024 or SLC1024 cards in the other slots.

Connecting to a VLC1012

Use connectors **2-1** and **2-2** to connect to a VLC1012 in slot 2. Use connectors **3-1** and **3-2**, **4-1** and **4-2** and **5-1** and **5-2** in the same manner with VLC1012 cards in the other slots

1.4.2 Connections with the IES-3000

When you use the Ethernet extension card with the IES-3000, use the lower set of connector labels. They are labeled **1** to **16** from left to right. Connector **1** is for connecting to the line card in slot 1; connector **2** is for connecting to the line card in slot 2 and so on. One connector is labeled **8/9** since the EEC1020 itself goes in either slot 8 or 9 and a line card can go in the other.