10/100Base TX to 100Base FX
PCI-Based Media Converter

Model: **065-1060 Series**

Active

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CONNECTIVITY SYSTEMS
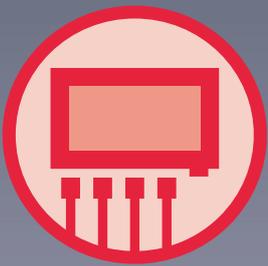
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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, 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

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Preface

This manual describes how to install and use the Ethernet media converter. The Converter introduced here provides one channel media conversion between 10/100BaseTX and 100BaseFX.

The Converter fully complies with IEEE802.3 10BaseT and IEEE802.3u 100BaseTX/FX standards.

In this manual, you will find:

- Product overview

- FEATURES ON THE MEDIA CONVERTER

- Illustrative LED functions

- Installation instructions

- Specifications

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INTRODUCTION

In response to an increase in fiber optics cabling deployment, we offer this PCI-based Media Converter Series as a concrete and affordable option. This PCI-based Media Converter Series is one of the most complete solutions in media conversion .The Series are available in all types of fiber connectors and modes: Multi-mode SC, ST, VF-45, MT-RJ, and LC; Single-mode SC and ST; WDM Single-mode SC.

The PCI-based Media Converter Series can be easily mounted to the PCI slot of a PC, workstation, or server without drivers installation and configuration. No additional power is needed for this PCI-based Media Converter series as the power is supplied via the PCI slot.

The PCI-based Media Converter Series expands the distance from a PC workstation or server to the fiber optical backbone.

This series provides excellent solutions that optimize flexible and reliable performance.

Product Overview

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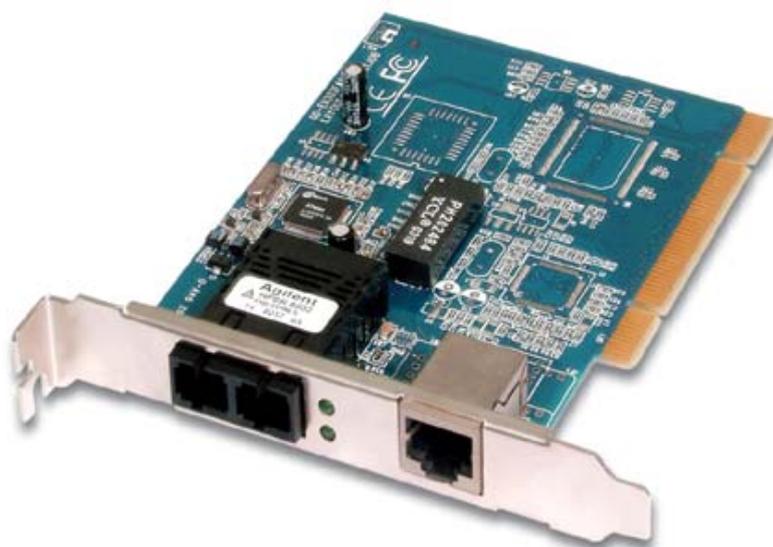
Product Features

- One port fiber connection:
    - Multi-mode with SC/ST/MT-RJ/VF-45/LC up to 2km
    - Single-Mode SC/ST fiber optic distance up to 120km
    - Single-Mode WDM SC single-fiber optic distance up to 40km
- One port RJ-45 connection:
    - Auto-negotiate 10/100Mbps and full/half duplex; auto-MDIX
- Compliant with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, 100Base-FX
- Back-pressure & IEEE802.3x compliant flow control
- Built-in data buffer 49K Bytes
- 2048 MAC Unicast-addresses with 4-layer hashing Table
- Two queues per port for QoS purpose
- Support packet length up to 1536 bytes
- Store-and-forward mechanism, non-blocking full wire-speed forwarding rate
- Support broadcast storm filtering
- LED Indication: LNK/ACT, 100
- PCI 2.1 Specification compliant

Packing List

When you unpack this product package, you will find the items listed below. Please inspect the contents, and report any apparent damage or missing items immediately to our authorized reseller.

- THE MEDIA CONVERTER

- USER'S MANUAL

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One Channel Media Converter

Ports

The Converter provides one TX port and one FX port. For the FX port, it provides options of Multi-mode fiber using SC, ST, VF-45, MT-RJ or LC connector or Single-mode fiber using SC or ST connector or WDM fiber using single SC connector. For the TX port, it uses RJ-45 connector and auto negotiate the speed of 10/100Mbps.

LED Indicators

The LED indicators give you instant feedback on status of the converter:

LEDs	State	Indication
100 (Mbps)	Steady	Connection at the speed of 100Mbps
	Off	Connection at the speed of 10Mbps
LNK/ACT	Steady	A valid network connection established LNK stands for LINK
	Flashing	Transmitting or receiving data ACT stands for ACTIVITY
	Off	Neither valid network connection established nor transmitting/receiving data.

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INSTALLATION

This chapter gives step-by-step installation instructions for the Converter.

Installing PCI-based Media Converter into PCI slot

Step 1: Turn off the power to the PC.

Step 2: Remove any metal decorations from your hands and wrists.

Step 3: Remove the cover from your PC.

Step 4: Locate an empty, non-shared bus mastering 32-bit PCI slot and remove the corresponding backplane. Save the screw for use in Step 6.

<Note>
i. Do not install the PCI-based Media Converter in a shared PCI slot. Avoid any PCI slot next to an ISA slot because this is often a shared slot and does not support bus mastering.
ii. If you have problems in identifying a suitable slot, check your PC documentation or ask your system administrator for help.

Step 5: Carefully insert the PCI-based Media Converter into the chosen slot and press firmly with proper push to ensure it is fully seated in the slot.

Step 6: Secure the PCI-based Media Converter with the screw you saved in step 4.

Step 7: Replace the PC cover.

# Install the PCI-based Media Converter into the PCI slot and screw it onto the backplane.
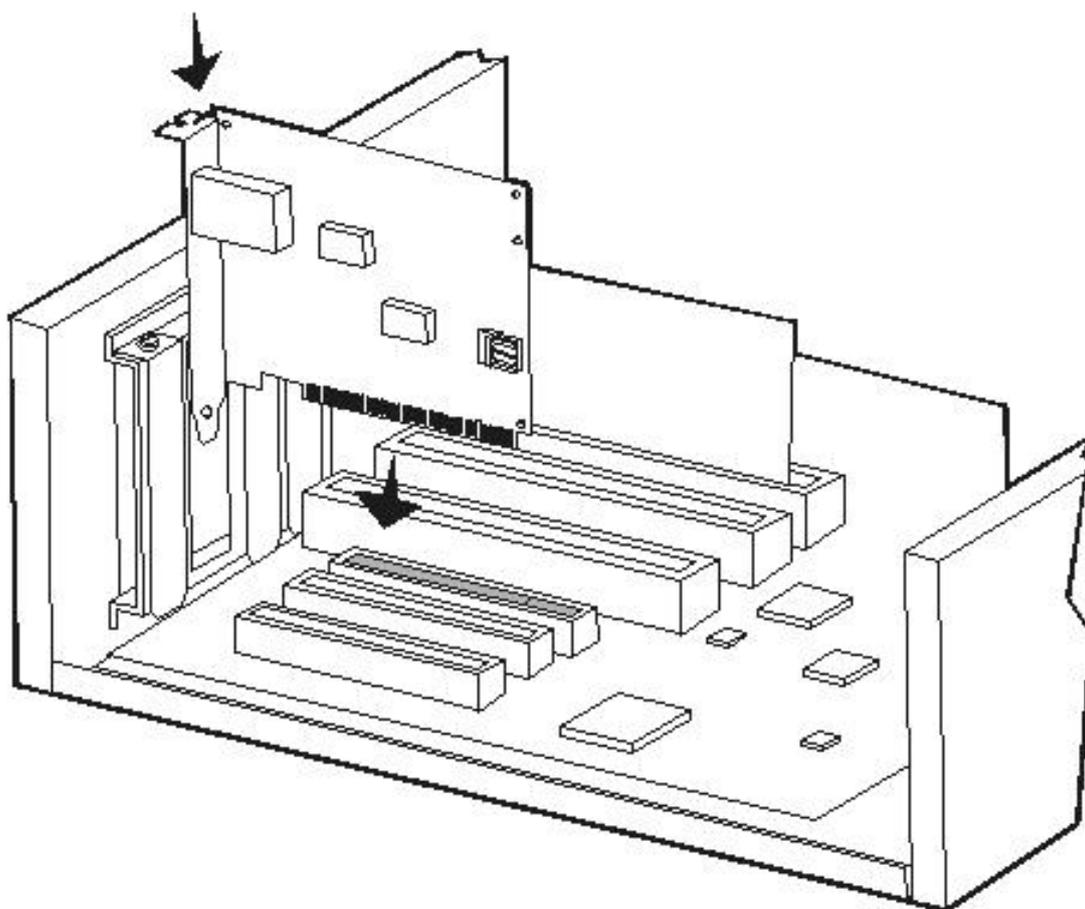
Figure 1 : Installing PCI-based Media Converter into 32-bit PCI slot

<Note>

Always ensure the power is cut off before any installation to avoid electric shock and possible damage to the equipments.

SPECIFICATIONS

Applicable Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX & 100BaseFX
Fixed Ports	1 TX port, 1 FX port
Speed 10BaseT 100BaseTX/FX	 10/20Mbps for half/full-duplex 100/200Mbps for half/full-duplex
Switching Method	Store-and-Forward
Forwarding rate	14,880/148,800pps for 10/100Mbps
LED Indicators	Per Unit - (2 LEDs): LNK/ACT; 100(Mbps)
Dimensions	W120 × D56 mm
Weight	90g
Operating Temperature	0°C ~ 45°C
Storage Temperature	-25°C ~ 70°C
Humidity	10 ~ 90%, non-condensing
Emissions	FCC part 15 Class A, CE Mark