VIMIN AQC113

VIMIN 10G PCI-E Network Card (Model AQC113) Instruction Manual

Model: AQC113 | Brand: VIMIN

INTRODUCTION

This manual provides detailed instructions for the installation, configuration, and use of your VIMIN 10G PCI-E Network Card. Please read this manual thoroughly before installation to ensure proper operation and to maximize the performance of your network adapter.
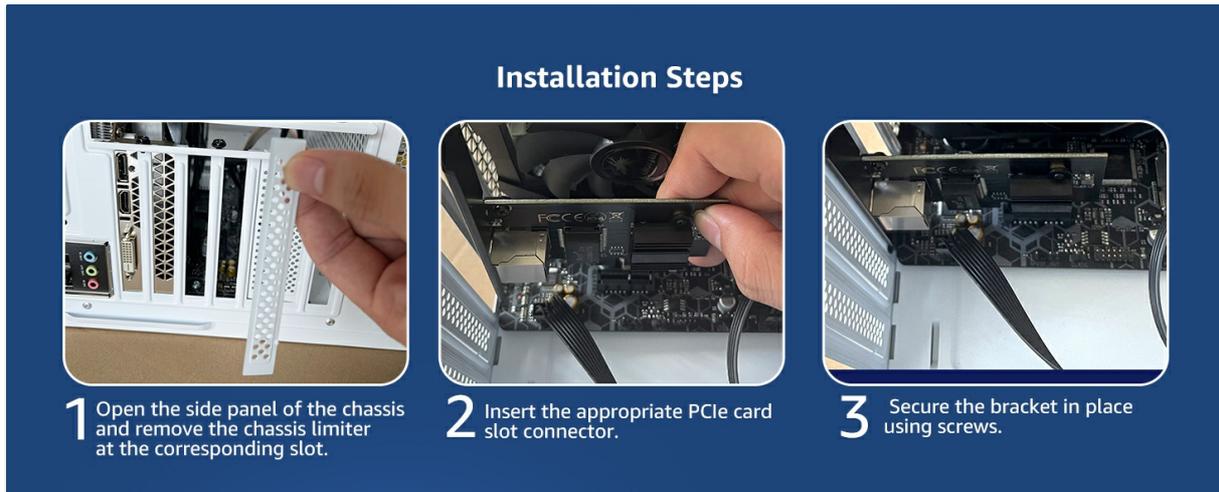
KEY FEATURES

- **10Gbps RJ45 Copper Port:** Equipped with a Marvel AQC113 chipset, offering up to 10Gbps network speed for reliable high-speed data transfer.
- **Rapid High-Speed Transmission:** Supports PCIe 3.0 x4 bus interface, converting PCIe X4/X8/X16 slots into 10G RJ-45 Ethernet ports for efficient data transfer.
- **Multi-Purpose Compatibility:** Supports various data rates including 10Gbps, 5Gbps, 2.5Gbps, 1Gbps, and 100Mbps Ethernet connections with intelligent auto-negotiation.
- **Flexible Bracket Adaptability:** Includes both low-profile and standard brackets for compatibility with diverse computer chassis.
- **Seamless System Support:** Compatible with Windows 10/11, Windows Server, and Linux operating systems. Drivers are provided via a USB drive.
- **Protocol Standard Compliance:** Compliant with IEEE 802.3an, IEEE 802.3bz, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3x, IEEE 802.3az, IEEE 802.1Q standards.

PACKAGE CONTENTS

- 1 x VIMIN 10G PCI-E Network Card (AQC113)
- 1 x Standard Profile Bracket (pre-installed)
- 1 x Low-Profile Bracket
- 1 x Driver USB Drive
- 1 x Quick Installation Guide (This manual serves as a detailed guide)

Hardware Installation

1. Power off your computer and disconnect the power cable.

2. Open the computer case.

3. Locate an available PCI Express x4, x8, or x16 slot on your motherboard.

4. Remove the corresponding slot cover from the computer chassis. If necessary, replace the standard bracket on the network card with the low-profile bracket.

5. Carefully insert the VIMIN 10G PCI-E Network Card into the chosen PCIe slot until it is firmly seated.

6. Secure the network card with a screw to the computer chassis.

7. Close the computer case and reconnect the power cable.

8. Connect an Ethernet cable to the RJ45 port on the network card.

This image illustrates the three main steps for hardware installation: 1. Opening the chassis and removing the slot limiter. 2. Inserting the PCIe card into the slot. 3. Securing the bracket with screws.

The network card comes with both standard and low-profile brackets to fit various computer cases. It is compatible with PCI Express x4, x8, and x16 slots.

Driver Installation

After hardware installation, you will need to install the appropriate drivers for your operating system.

1. Start your computer.

2. Insert the provided USB drive containing the drivers.

3. Navigate to the USB drive and locate the driver folder corresponding to your operating system (Windows, Linux).
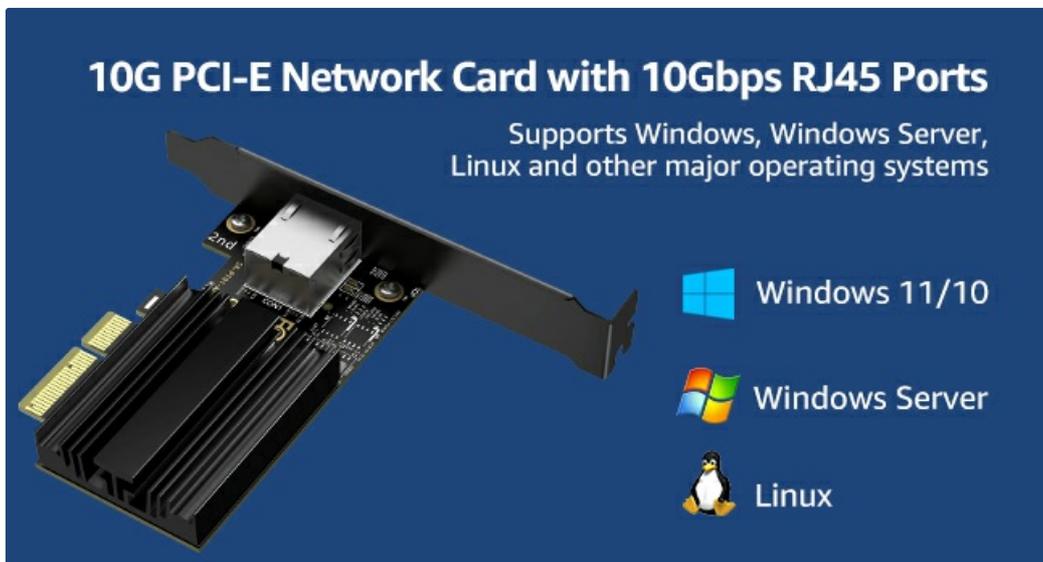
4. Follow the on-screen instructions to install the drivers. For Windows, run the setup executable. For Linux, consult the README file within the driver folder for specific commands.
5. Restart your computer after the driver installation is complete.

Note: In some cases, especially with newer Linux distributions, the driver may be automatically recognized and installed by the system.

OPERATING SYSTEM COMPATIBILITY

The VIMIN 10G PCI-E Network Card supports a wide range of operating systems:

- Windows 10
- Windows 11
- Windows Server (various versions)
- Linux (various distributions)
- VMware

This network card is compatible with Windows 10/11, Windows Server, and Linux operating systems.

TECHNICAL SPECIFICATIONS

Feature	Detail
Model Number	AQC113
Brand	VIMIN
Hardware Interface	Ethernet
Data Link Protocol	Ethernet
Data Transfer Rate	10 Gigabits Per Second (10Gbps)
Compatible Data Rates	10Gbps/5Gbps/2.5Gbps/1Gbps/100Mbps
Controller Chipset	Marvel AQC113
PCI Express Interface	PCIe 3.0 x4 (Compatible with X4, X8, X16 slots)

Ports	1 x RJ45 Copper Port
Compatible Devices	Desktop, Laptop (with available PCIe slot)
Supported Operating Systems	Windows 10/11, Windows Server, Linux, VMware
Protocol Standards	IEEE 802.3an, IEEE 802.3bz, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3x, IEEE 802.3az, IEEE 802.1Q
Package Dimensions	5.79 x 5.12 x 1.1 inches
Item Weight	5.3 ounces (0.15 Kilograms)
Color	Black

TROUBLESHOOTING

No Network Connection After Installation

- **Verify Hardware Installation:** Ensure the network card is fully seated in the PCIe slot and securely fastened.
- **Check Cable Connection:** Confirm the Ethernet cable is properly connected to both the network card and your router/switch.
- **Driver Installation:** Make sure the correct drivers for your operating system have been installed. Refer to the "Driver Installation" section.
- **Device Manager (Windows):** Check Device Manager to see if the network card is recognized and if there are any error symbols (e.g., yellow exclamation mark). Reinstall drivers if necessary.
- **BIOS/UEFI Settings:** Ensure the PCIe slot is enabled in your system's BIOS/UEFI settings.

Slow Network Speeds

- **Cable Quality:** Use a high-quality Cat6a or Cat7 Ethernet cable for 10Gbps connections. Lower category cables may limit speed.
- **Router/Switch Compatibility:** Ensure your network router or switch supports 10Gbps speeds on the connected port.
- **Driver Updates:** Check for the latest drivers from the VIMIN website or the provided USB drive.
- **System Resources:** High CPU usage or insufficient RAM on your computer can affect network performance.

Card Not Detected in Windows 11

- **PCIe Slot Bandwidth:** Some motherboards share bandwidth between PCIe slots and M.2 NVMe slots. If the card is not detected, try moving it to a different PCIe slot or temporarily removing other M.2 devices to check for conflicts.
- **Manual Driver Update:** If the card appears in Device Manager but has issues, try manually updating the driver by searching for the Intel 10 Gigabit Ethernet driver pack and pointing Device Manager to the extracted driver files.

WARRANTY AND TECHNICAL SUPPORT

The VIMIN 10G PCI-E Network Card comes with a 1-year after-sale service.

For technical assistance, troubleshooting, or warranty inquiries, please contact our support team:

- **Email:** support@vimintech.com
- **Online Support:** Visit the official VIMIN website for FAQs and additional resources.

VIMIN offers dedicated customer support via email at support@vimintech.com, backed by a professional technical team providing 24-hour service.

SAFETY INFORMATION

- Always power off your computer and disconnect the power cable before installing or removing any internal components.
- Handle the network card by its edges to avoid touching the gold-plated connectors or sensitive components.
- Use appropriate anti-static precautions (e.g., anti-static wrist strap) to prevent electrostatic discharge (ESD) damage.
- Ensure proper ventilation within your computer case to prevent overheating, especially for high-performance components.
- Do not attempt to modify or repair the device yourself. Refer to qualified personnel for service.

PRODUCT OVERVIEW VIDEO

Your browser does not support the video tag.

This video provides a visual overview of the VIMIN 10G PCI-E Network Card, highlighting its key features, installation process, and high-speed capabilities.