**ASUS ExpertWiFi EBG15**

# ASUS ExpertWiFi EBG15 Gigabit VPN Wired Router User Manual

Model: ExpertWiFi EBG15

## 1. Introduction

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your ASUS ExpertWiFi EBG15 Gigabit VPN Wired Router. The EBG15 is designed to offer a secure and scalable network solution for small to medium-sized businesses, featuring multiple WAN ports, robust security, and remote management capabilities.

## 2. Package Contents

Verify that all items are present in your product package:

- ASUS ExpertWiFi EBG15 Gigabit VPN Wired Router
- Power adapter
- RJ-45 Ethernet cable
- Quick start guide
- Warranty card

## 3. Product Overview

The ASUS ExpertWiFi EBG15 router features a compact, fanless design with a durable metal housing, suitable for various installation environments including wall-mounting. It provides multiple ports for flexible network connectivity.

### 3.1 Front Panel Layout




Figure 1: Front view of the ASUS ExpertWiFi EBG15 router, showing the USB port, WAN port, WAN/LAN ports, LAN ports, PWR LED, and Reset button.

The front panel includes the following components:

- **PWR LED:** Indicates power status.
- **Reset Button:** Used to reset the router to factory default settings.
- **USB 3.0 Port:** Functions as a WAN backup for mobile tethering or data sharing.
- **WAN Port (Port 1):** Connects to your Internet Service Provider (ISP) modem.
- **WAN/LAN Ports (Ports 2-3):** Can be configured as additional WAN ports for load balancing or as standard LAN ports.
- **LAN Ports (Ports 4-5):** Connect to local network devices such as computers, switches, or access points.

## 3.2 Rear Panel Layout

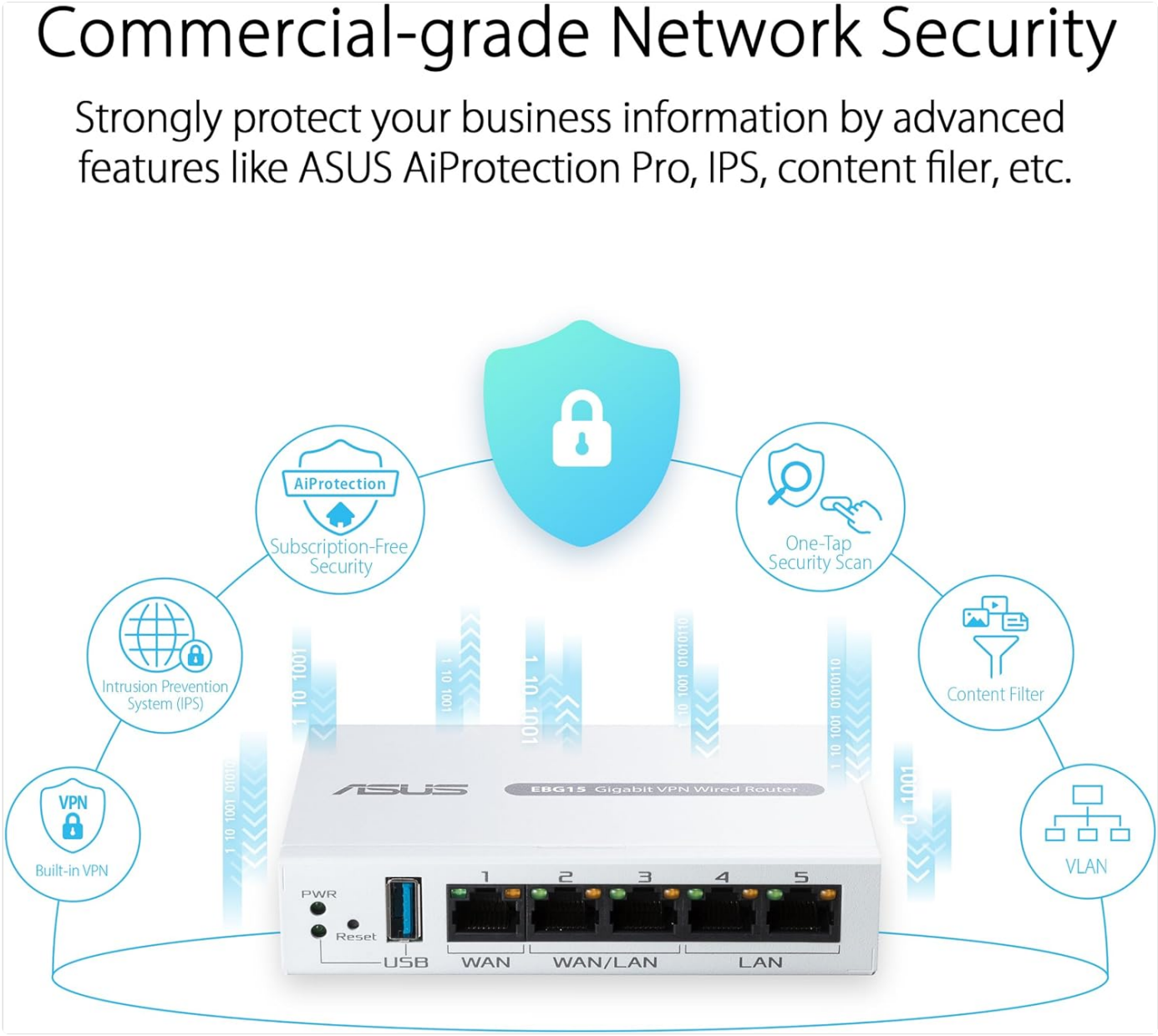



Figure 2: Rear view of the ASUS ExpertWiFi EBG15 router, showing the DCIN power input.

The rear panel features the **DCIN** port for connecting the power adapter.

## 3.3 Dimensions and Design



Figure 3: The ASUS ExpertWiFi EBG15 router features a durable metal housing, compact size (approximately 121mm x 75mm x 26mm), wall-mounting capability, and a fanless design for silent operation.

The router's compact dimensions and wall-mounting option allow for flexible placement. The fanless design ensures silent operation and reduces dust accumulation.

## 4. Setup

Follow these steps to set up your ASUS ExpertWiFi EBG15 router.

### 4.1 Initial Hardware Connection

1. **Connect to Power:** Plug the power adapter into the DCIN port on the rear of the router and then into a power outlet. The PWR LED on the front panel will illuminate.
2. **Connect to Internet (WAN):**
    - Connect one end of the provided RJ-45 Ethernet cable to your ISP modem's LAN port.
    - Connect the other end of the Ethernet cable to the **WAN port (Port 1)** on the front of the EBG15 router.
3. **Connect Local Devices (LAN):**
    - Connect your computer or other network devices to any of the **LAN ports (Ports 4-5)** using Ethernet cables.
    - If you are expanding your network with an ASUS ExpertWiFi switch or access point, connect it to a LAN port.
4. **Optional: Connect Additional WAN Sources:** If you have multiple internet connections, connect them to the **WAN/LAN ports (Ports 2-3)**. These ports can be configured as additional WAN inputs for load balancing.
5. **Optional: USB WAN Backup:** For internet backup, connect a mobile phone with hotspot functionality to the **USB 3.0 port**. This provides a stable internet connection in case your primary WAN fails.



Figure 4: Connectivity options for the ASUS ExpertWiFi EBG15, illustrating WAN, WAN/LAN, LAN, and USB ports for various devices.

### 4.2 Accessing the Management Interface

You can manage your router via a web browser or the ASUS ExpertWiFi mobile app.

- **Web Browser Setup:** Open a web browser on a connected computer and navigate to the router's default IP address (usually 192.168.1.1 or router.asus.com). Follow the on-screen instructions for initial configuration.
- **ASUS ExpertWiFi Mobile App:** Download the ASUS ExpertWiFi app from your mobile device's app store. Use the app's Bluetooth setup feature for convenient initial configuration and ongoing management.

# 5. Operating the Router

The ASUS ExpertWiFi EBG15 offers a range of features for secure and efficient network operation.

## 5.1 Network Security Features

The router includes commercial-grade network security features to protect your business information:

Figure 5: Overview of the ASUS ExpertWiFi EBG15's security features, including AiProtection, Intrusion Prevention System (IPS), Content Filter, Built-in VPN, and VLAN support.

- **ASUS AiProtection Pro:** Provides a free subscription to robust network security, including deep packet inspection (DPI) and virtual patching to block malicious traffic.
- **Intrusion Prevention System (IPS):** Actively monitors network traffic for suspicious activity and blocks potential threats.
- **Layer 7 Firewall:** Offers advanced firewall capabilities to control network traffic based on application type.
- **Content Filter:** Allows administrators to block access to specific websites or content categories.
- **Built-in VPN:** Supports various VPN protocols to secure remote access and site-to-site connections.
- **Safe Browsing:** Enhances online security by blocking malicious websites.

## 5.2 VLAN for Enhanced Security

Each Ethernet port can be assigned to one or more Virtual Local Area Network (VLAN) IDs. This feature allows you to segment your network, isolating different departments or device types for improved security and management.

## 5.3 Multi-WAN and Load Balancing

The EBG15 supports up to three WAN Ethernet ports (one dedicated WAN port and two configurable WAN/LAN ports). This enables load balancing across multiple internet connections, optimizing broadband usage and providing redundancy for stable connectivity.

## 5.4 Site-to-Site VPN

The router supports Site-to-Site VPN connections, including WireGuard VPN, to securely link your central office with multiple branch locations. This facilitates secure data exchange and resource sharing across geographically dispersed sites.



Figure 6: Illustration of a Site-to-Site VPN setup, connecting a headquarters to branch offices via the internet using ASUS ExpertWiFi routers.

### 5.5 Remote Management with ASUS ExpertWiFi App

Manage your network remotely using the ASUS ExpertWiFi mobile app. The app provides a user-friendly interface for monitoring network status, configuring settings, and managing connected devices, offering flexible management options for your business network.

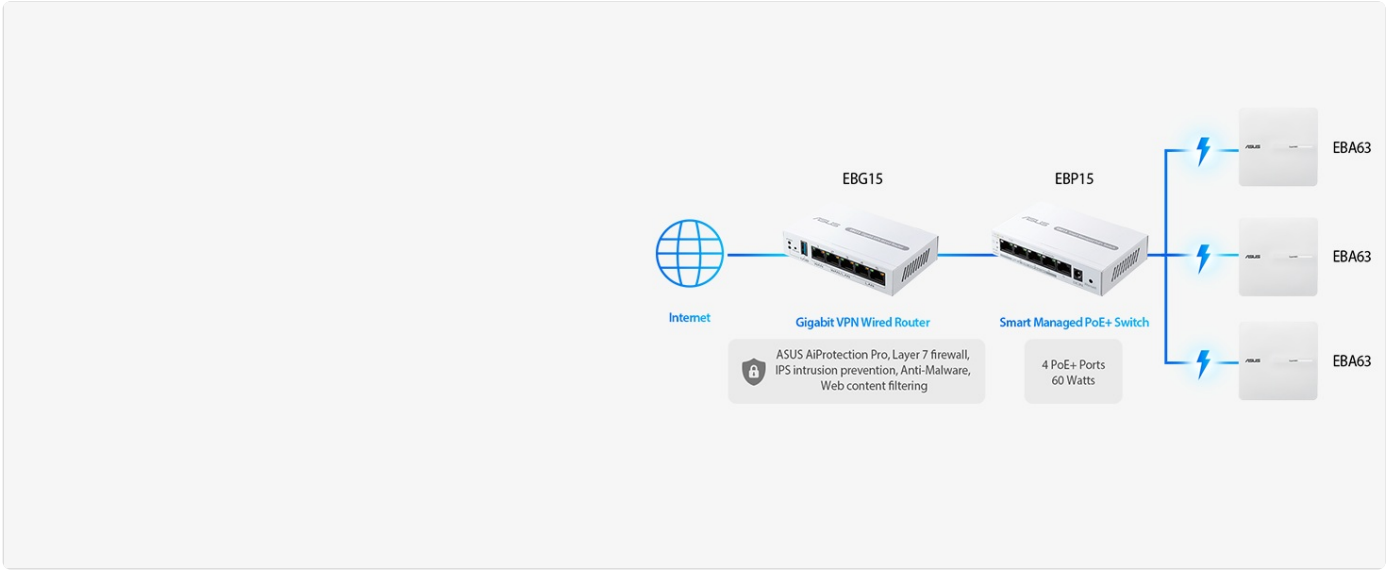



Figure 7: The ExpertWiFi Self-defined Network (SDN) allows flexible management via app/web tools, supporting multiple SSIDs for device prioritization.

## 6. Maintenance

Regular maintenance ensures optimal performance and longevity of your router.

- **Firmware Updates:** Periodically check for and install firmware updates through the router's web interface or the ASUS ExpertWiFi app. Firmware updates often include security patches, performance improvements, and new features.
- **Cleaning:** The EBG15 features a fanless design, reducing dust accumulation. However, gently wipe the exterior with a soft, dry cloth to keep it clean. Ensure the router is powered off before cleaning.
- **Resetting the Router:** If you encounter persistent issues or wish to reconfigure the router from scratch, you can perform a factory reset. Locate the **Reset button** on the front panel. With the router powered on, press and hold the Reset button for approximately 5-10 seconds until the PWR LED blinks. Release the button, and the router will restart with factory default settings.

## 7. Troubleshooting

This section addresses common issues you might encounter with your ASUS ExpertWiFi EBG15 router.

| Problem | Solution |
| --- | --- |

| Problem | Solution |
| --- | --- |
| No internet connection. | ◦ Check if the WAN cable is securely connected to the router's WAN port and your modem.<br>◦ Ensure your modem is powered on and has an active internet connection.<br>◦ Restart both your modem and the router.<br>◦ Verify WAN settings in the router's web interface or app.<br>◦ If using USB WAN backup, ensure the mobile phone has an active hotspot and is connected correctly. |
| Slow network speeds. | ◦ Check your internet service provider's speed.<br>◦ Ensure all Ethernet cables are Cat5e or higher and in good condition.<br>◦ Monitor network traffic through the router's interface to identify bandwidth-intensive applications.<br>◦ If using multiple WANs, ensure load balancing is configured correctly. |
| Cannot access router's web interface. | ◦ Ensure your computer is connected to one of the router's LAN ports.<br>◦ Verify the IP address you are using (default is usually192.168.1.1 or router.asus.com).<br>◦ Temporarily disable any firewall or antivirus software on your computer.<br>◦ Try accessing from a different web browser.<br>◦ If issues persist, perform a factory reset (see Maintenance section). |
| VLANs not functioning as expected. | ◦ Review your VLAN configuration in the router's web interface.<br>◦ Ensure connected devices or switches are also configured for the correct VLANs.<br>◦ Check for any conflicting IP address ranges between VLANs. |

## 8. Specifications

| Feature | Detail |
| --- | --- |
| Brand | ASUS |
| Model Name | ExpertWiFi EBG15 |
| Connectivity Technology | Ethernet (Wired) |
| Ports | 1x Gigabit WAN, 2x Gigabit WAN/LAN, 2x Gigabit LAN, 1x USB 3.0 |
| Operating System | ASUSWRT |
| Dimensions (LxWxH) | Approximately 121mm x 75mm x 26mm (4.76 x 2.95 x 1.02 inches) |
| Item Weight | 9.6 ounces |

| Feature | Detail |
|---|---|
| Special Features | ASUS ExpertWiFi APP, AiMesh Router (when paired with compatible devices), Network standard: IEEE 802.1p,q/802.3,ab,i,u,x/IPv4, 6, VPN router, AiProtection Pro, IPS, Layer 7 Firewall, VLAN support |
| Wireless Communication Standard | 802.11a (Note: This is a wired router; this specification may refer to compatibility with wireless access points or general network standards.) |
| Frequency Band Class | Single-Band (Note: This is a wired router; this specification may refer to compatibility with wireless access points or general network standards.) |
| Recommended Uses | Business, Gaming, Home |
| Color | WHITE |
| Date First Available | March 26, 2024 |

## 9. Warranty Information

Your ASUS ExpertWiFi EBG15 router comes with a limited warranty. Please refer to the included warranty card in your package for specific terms, conditions, and duration of coverage. Keep your proof of purchase for warranty claims.

## 10. Support

For further assistance, technical support, or to download the latest drivers and firmware, please visit the official ASUS support website:

**www.asus.com/support/**

You can also utilize the ASUS ExpertWiFi mobile app for quick access to support resources and troubleshooting guides.

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### Ask a question about this manual

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**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**