**Securing the Smart Home** NETGEAR Armor, powered by Bitdefender, Leads the Pack in Router Security Test



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### SUMMARY

As smart home devices like TVs, cameras, and thermostats become increasingly common, home networks are facing rising cyber risks. According to <u>recent data</u>, the average home network faces 10 security threats every day. Routers, which act as gateways for these devices to the internet, are prime targets for cybercriminals. In this landscape, a router-based cybersecurity solution is essential, providing robust protection against threats, unauthorized access, and privacy breaches across all connected devices.

Top independent security testing organization **AV Comparatives**<sup>1</sup> evaluated four top commercially available routers—**NETGEAR**, **TP-Link**, **eero**, **and ASUS**—for their security and protection capabilities<sup>2</sup>.

**NETGEAR Armor by Bitdefender** outperformed its competitors, scoring highest in Router Security Features, Router Safety and Malicious Website Detection delivering unmatched router security and value to consumers as well as top Endpoint Protection.

Vendor	Product	Firmware	Antivirus Engine
NETGEAR	Orbi RBR860B	7.2.6.31_5.0.24	NETGEAR Armor by Bitdefender
TP-Link	Deco BE9300	1.0.8 Build 20240723 Rel. 26458	TP-Link HomeShield by Avira
eero	Max 7	7.5.0-2654	eero Plus by OpenDNS
ASUS	RT-BE96U	3.0.0.6.102_34488	ASUS AiProtection by Trend Micro

### THE EVALUATION PROCESS

For this evaluation, **AV-Comparatives** independently developed a detailed test procedure and carefully selected the scenarios to be included.

Their testing focused on critical aspects such as Malicious URL Protection, Brute-force Protection, Denial-of-Service (DoS) Protection, Sensitive Data Protection, and Exploit Protection.

Additionally, they created a checklist to assess **fundamental security features** of each router, including checks for open ports, known vulnerabilities, default passwords, password policies, and remote access settings.

## **ROUTER SECURITY FEATURES**

Solution	NETGEAR Armor	TP-Link HomeShield	eero Plus	ASUS AiProtection
	by Bitdefender	by Avira	by OpenDNS	by Trend Micro
Test Score*	9.1/10	7.3/10	5.5/10	6.4/10

\*The test score is derived from the percentage of successfully passed tests / detected attacks

The test includes critical security checks performed during or immediately following the initial router setup, with results reflecting each router's default configuration after setup.

Out of the four routers tested, **NETGEAR Armor by Bitdefender** stands out for providing the most security features. It's the only tested solution that protects smart home devices by identifying vulnerable LANs and detecting anomalies. Furthermore, **NETGEAR Armor by Bitdefender** improves security by enforcing a strict password policy, which includes length and character requirements.

<sup>1 &</sup>lt;u>AV-Comparatives</u> is a leading independent organization renowned for its rigorous testing to verify the effectiveness of security solutions. Using one of the largest threat collections worldwide, it creates a real-world environment for truly accurate testing. Certification by AV-Comparatives provides an official seal of approval for software performance which is globally recognized.

<sup>2</sup> Full report available here https://www.av-comparatives.org/wp-content/uploads/2024/11/avc\_iot\_router\_test\_2024.pdf

# **ROUTER SAFETY**

Solution	NETGEAR Armor	TP-Link HomeShield	eero Plus	ASUS AiProtection
	by Bitdefender	by Avira	by OpenDNS	by Trend Micro
Test Score*	8.7/10	5.7/10	0/10	8/10

\*The test score is derived from the percentage of successfully passed tests / detected attacks

The test's goal was to evaluate the overall security of the router, as well as the devices and services located in the test LAN and WAN, using various penetration scenarios.

**NETGEAR Armor by Bitdefender** has the highest test score among the four tested solutions. It received the most points for protection against Brute Force Attacks. It is the only solution among the four that receives the highest score for protection against Denial-of-Service Attacks (DoS). It is the only tested solution that protects against ICMP flood LAN-WAN and TCP SYN flood LAN-WAN as well as sensitive data attacks. It provides strong protection against Command Injection Attacks and Exploit Attacks, including Botnet Behavior LAN-WAN and HTTP Vulnerability WAN-LAN.

## **MALICIOUS WEBSITES DETECTION**

Solution	NETGEAR Armor	TP-Link HomeShield	eero Plus	ASUS AiProtection
	by Bitdefender	by Avira	by OpenDNS	by Trend Micro
Detection Efficiency**	61-80%	31-60%	31-60%	31-60%

\*\*Rate of successful detections

The test's goal was to outline the Router's malicious website detection capabilities using a variety of new malicious website samples. A detection indicates that either the website or the connection to it is blocked.

NETGEAR Armor by Bitdefender outperformed the other four tested solutions in terms of detection efficiency.

## **ENDPOINT PROTECTION<sup>3</sup>**

Solution	NETGEAR Armor by Bitdefender	TP-Link HomeShield by Avira	eero Plus by OpenDNS	ASUS AiProtection by Trend Micro
Availability	Standard	Total Security Package	N/A	N/A
Protection Rate***	99,98%	99,96%	N/A <sup>4</sup>	N/A <sup>5</sup>

\*\*\*full methodology of endpoint protection tests available here

NETGEAR, TP-Link and Eero offer an endpoint protection solution depending on the subscription plan. **NETGEAR Armor** covers up to 50 devices for different platforms.

Among the four solutions tested, **NETGEAR Armor** is the only one to include endpoint protection as part of its standard package. **Powered by Bitdefender**, this endpoint solution has an 99.98% protection rate, according to the latest AV-Comparatives Malware Protection Test for Consumer Endpoint Solutions.

5 Asus doesn't offer an Endpoint Protection solution associated with their Router Security Solution

<sup>3</sup> AV-Comparatives Malware Protection Test September 2024

<sup>4</sup> MalwareBytes hasn't participated in the latest AV-Comparatives Malware Protection Tests

#### **CONCLUSION**

NETGEAR Armor, powered by Bitdefender, emerges as the clear leader in router-based cybersecurity.

In AV-Comparatives' comprehensive evaluation, **NETGEAR Armor** consistently achieved the highest scores across critical areas, including Router Security Features, Router Safety and Malicious Website Detection.

As the only solution to provide extensive security features such as LAN vulnerability detection and anomaly detection **NETGEAR Armor** stands out in safeguarding smart home networks.

With an endpoint protection rate of 99.98% and its inclusion in the standard package, **NETGEAR Armor by Bitdefender** offers unmatched protection and value, making it the premier choice for consumers seeking reliable and comprehensive security both at home and on the go.

Bitdefender is a cybersecurity leader delivering best-in-class threat prevention, detection, and response solutions worldwide. Guardian over millions of consumer, business, and government environments, Bitdefender is one of the industry's most trusted experts for eliminating threats, protecting privacy and data, and enabling cyber resilience. With deep investments in research and development, Bitdefender Labs discovers over 400 new threats each minute and validates around 40 billion daily threat queries. The company has pioneered breakthrough innovations in antimalware, IoT security, behavioral analytics, and artificial intelligence, and its technology is licensed by more than 150 of the world's most recognized technology brands. Launched in 2001, Bitdefender has customers in 170+ countries with offices around the world.

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