

# Netgate 8200

## Security Gateway Appliance

The Netgate 8200 Security Gateway with pfSense® Plus software is one of the most powerful security gateways in its class. Experience high-performance firewall, VPN, and router capabilities, easy GUI management, and a robust feature set with no artificial limits or add-ons required to make your system fully functional and no additional usage or feature-based pricing.

It combines the power of the refreshed Intel® Atom® C3758R 8 core / 8 threads / 2.4 GHz CPU with integrated QuickAssist & AES-NI and 16 GB of memory for a blistering fast user experience, delivering over 18 Gbps of firewall and L3 forwarding across 8 Independent 1 Gbps, 2.5 Gbps, and 10 Gbps Flexible WAN/LAN ports.



## Highest Performance in its Class



The Netgate 8200 is ideal for remote offices, edge deployments, managed service providers, and enterprise networks looking for serious performance in a rack mount form factor. The low-powered, actively-cooled Netgate 8200 provides flexible port configurations to support 1 to 10 Gbps WAN capabilities across RJ45, SFP, and SFP+ ports, as well as 4 discrete, unswitched 2.5 Gbps RJ45 LAN ports.



- **8-Core 2.4 GHz Intel Atom CPU, with integrated AES-NI and QAT (QuickAssist Technology)**

Delivers 18.6 Gbps routing for common iPerf3 traffic and over 18.55 Gbps of firewall throughput.

- **8 Independent 1G, 2.5G, and 10G Flexible WAN/LAN Configurations**

Use a combination of 4 ports for maximum flexibility with 1 and 10 Gbps WAN connections across RJ45, SFP, and SFP+ ports, as well as 4 discrete unswitched 2.5 Gbps RJ45 LAN ports.

- **Quiet operation and Low Power Draw in 1U form factor**

The actively controlled, integrated cooling fan and low power draw of the Netgate 8200 provide efficient thermal management and uncharacteristically quiet operation compared to other 1U rack-mounted systems in its class.

## Specifications

<b>CPU</b>	8-Core 2.4 GHz Intel Atom C3758R CPU, with integrated AES-NI and QAT (QuickAssist Technology)
<b>Physical Network I/O Ports</b>	(2) 10 GbE SFP+ Ports (2) 1 GbE Combo Ports (RJ45/SFP) (4) discrete, unswitched Intel i226 2.5 Gbps RJ45 Ports allow for versatile LAN/WAN connectivity
<b>Storage</b>	128 GB NVMe M.2 SSD (B+M Key)
<b>Memory</b>	16 GB DDR4 RAM w/o ECC
<b>Physical Expansion Card Slots</b>	2x m.2 (Key-B slot) with dual-SIM (LTE, Wi-Fi, or NVMe) (PCIe, USB 2.0, USB 3.0) 1x Mini-PCIe Slot (Wi-Fi only)
<b>Console Port</b>	1x auto-detect console port: "Cisco pinout" RJ45 + micro-USB (micro-USB cable included with each system)
<b>USB Ports</b>	2x USB 3.0 jacks (USB-A female) (located on Right Side Rear)
<b>LED</b>	3x 4-color LEDs (RGB + amber) Software / bootloader controllable via Microchip MCU
<b>Enclosure</b>	1U Rack - Aluminum, plastic, and steel enclosure. 19 x 10 x 1.75 inches or 482.6 x 254 x 44.45 mm
<b>Cooling</b>	Active - integrated quiet chassis fan with onboard control
<b>Environmental</b>	0°C (32°F) to 40°C (104°F) - ambient

# Performance<sup>1</sup>

## IPERF Traffic<sup>2</sup>

- L3 Forwarding: 18.60 Gbps
- Firewall: 18.55 Gbps
- IPsec VPN: 3.24 Gbps (AES-GCM-128 w/QAT)

## IMIX Traffic<sup>3</sup>

- L3 Forwarding: 11.76 Gbps
- Firewall: 5.1 Gbps
- IPsec VPN: 810 Mbps (AES-GCM-128 w/QAT)

<sup>1</sup> Refer to <https://www.netgate.com/products/appliances/> for the latest performance benchmarks. All performance tests are based upon maximum memory configuration and base model port configuration (no port expansion). Throughput measurements are based upon maximum bidirectional traffic across all available ports.

<sup>2</sup> Basic Traffic (Primarily Data Download): iPerf3 traffic is TCP - 1460 byte payload and TCP framing.

<sup>3</sup> Complex Traffic (Voice, Data, Video): Simple IMIX traffic is sets of 7 (40) byte packets, 4 (576) byte packets, 1 (1500) byte packets, plus Ethernet.