Hardware Comparison

The Netgate® hardware comparison chart is designed to give visitors a quick side-by-side comparison of Netgate appliances running pfSense® Plus software against one another. While most of this data (and more) exists on individual product pages, we believe the chart makes it fast and easy for viewers to quickly determine which appliance is best for their needs.

The comparison matrix has two critical dimensions:

1. Packet Sizes: iPerf3 and IMIX
2. Secure Networking Function: Routing (Forwarding), Firewall, VPN

This provides a very clear manner by which products can be compared - and under different levels of user-experienced traffic conditions. We see this as crucial given our user base varies, literally, from home consumers (with relatively light bandwidth and firewall needs) all the way to sophisticated enterprises (who demand predictable performance under the most strenuous encryption and packet mix conditions).
# Netgate Hardware Comparison Chart

## WHO
- **Netgate 1100**
  - Desktop
  - **$179**
- **Netgate 2100**
  - Desktop
  - **$299**
  - **Home**
  - **Branch/Small Business**
- **Netgate 5100**
  - Desktop
  - **$699**
  - **Home**
  - **Branch/Small Business**
  - **Medium Business**
- **Netgate 6100**
  - Desktop
  - **$699**
  - **Home**
  - **Branch/Small Business**
  - **Medium Business**
- **Netgate 7100**
  - Rack
  - **$999**
  - **Medium Business**
  - **Large Business**
  - **Data Center**
- **Netgate 1537**
  - Rack
  - **$1,999**
  - **Medium Business**
  - **Large Business**
  - **Data Center**
- **Netgate 1541**
  - Rack
  - **$2,699**
  - **Medium Business**
  - **Large Business**
  - **Data Center**

## NEEDS
- Cost efficient / Low power
- Sleek, compact
- Silent operation (fanless)
- Put on a desktop, shelf, or wall
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- Cost efficient / Low power
- Sleek, compact
- Silent operation (fanless)
- Put on a desktop, shelf, or wall
- Upgradeable Storage
- Equipped for memory-intensive packages, e.g., UTM/IPS
- Desktop form factor only
- Expandable memory
- Uplodable storage (5.2 GB/s)
- High Availability
- 1, 2, 3, and 10 GbE Network Interfaces
- Rack Mount
- Expandable memory
- Expandable storage
- Network expandable
- High Availability
- Ruta pfSense® Plus or THiSR® Software

## PERFORMANCE
- **L3 Forwarding: 880 Mbps**
  - Firewall: 464 Mbps
  - IPS: 248 Mbps
- **L3 Forwarding: 450 Mbps**
  - Firewall: 110 Mbps
  - IPS: 44 Mbps
- **L3 Forwarding: 1,504 Mbps**
  - Firewall: 811 Mbps
  - IPS: 214 Mbps
- **L3 Forwarding: 842 Mbps**
  - Firewall: 314 Mbps
  - IPS: 84 Mbps
- **L3 Forwarding: 3,76 Gbps**
  - Firewall: 2,75 Gbps
  - IPS: 507 Mbps
- **L3 Forwarding: 3,83 Gbps**
  - Firewall: 2,92 Gbps
  - IPS: 922 Mbps
- **L3 Forwarding: 18,76 Gbps**
  - Firewall: 10,67 Gbps
  - IPS: 310 Mbps
- **L3 Forwarding: 6,24 Gbps**
  - Firewall: 5,14 Gbps
  - IPS: 451 Mbps
- **L3 Forwarding: 18,53 Gbps**
  - Firewall: 12,71 Gbps
  - IPS: 262 Mbps
- **L3 Forwarding: 15,23 Gbps**
  - Firewall: 9,04 Gbps
  - IPS: 1,46 Gbps
- **L3 Forwarding: 18,76 Gbps**
  - Firewall: 10,67 Gbps
  - IPS: 310 Mbps
- **L3 Forwarding: 15,25 Gbps**
  - Firewall: 9,02 Gbps
  - IPS: 1,42 Gbps

## HARDWARE
- Dual Core Cortex-A93
  - ARMv8 Soc @ 1,2Ghz
  - 4 GB DDR4
  - 1 GB DDR4
  - (4) composite ports: 2x 1Gbps RJ45 combo with 1 Gbps uplink
- Dual Core Cortex-A93
  - ARMv8 Soc @ 1,2Ghz
  - 4 GB DDR4
  - (4) independent and individual ports:
    - 5x 1Gbps (5x RJ45 combo)
    - 6x 1Gbps (4x RJ45 combo + 2x RJ45 combo)
- Quad Core Inte® Atom™
  - C3558 @ 2,5Ghz
  - 1 GB DDR4
  - (4) independent ports:
    - 4x 1Gbps Ethernet Soc, Integrated MAC (2x CMAC Intel X520)
- Quad Core Inte® Atom™
  - C3558 @ 2,5Ghz
  - 1 GB DDR4
  - (4) independent ports:
    - 4x 1Gbps Ethernet Soc, Integrated MAC (2x CMAC Intel X520)
- Quad Core Inte® Atom™
  - C3558 @ 2,5Ghz
  - 16 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4
  - (4) independent ports:
    - 8 GB DDR4

## FOR MORE INFORMATION VISIT OUR BLOG POST

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**Footnotes:***
1. Performance tests are based upon minimum memory configuration and base model port configuration (per port expansion). Throughput measurements are based upon maximum bidirectional traffic across all available ports.
2. IPv6 performance tests are TCP and ICMP.
3. IPv4 performance tests are TCP and ICMP.
4. APU performance tests are TCP and ICMP.
5. Performance tests for Ruta pfSense® Plus and THiSR® Software.

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