

High-Density Open Visibility Packet Broker

The 4248-6C is part of the FixedBroker product line, consisting of 1U high density, high performance, packet brokers with Open Visibility Platform enabled capabilities. The Open Visibility advanced capabilities enable to turn the NPB into an intelligent cross-connect with Network Intelligent applications such as de-duplication, Netflow/IPFIX generation, TLS decryption, and more.



4248-6C front and rear view

The 4248-6C includes up to 48 ports of 10/25Gb¹, plus another six ports of 40/100Gb. All ports connect to a non-blocking switching fabric, ensuring that all combinations of ports are supported at full line rate, with no oversubscription, and with full-switching, line-rate connectivity from any port to any port.

The 4248-6C is a fully-featured packet broker that is capable of not only aggregation, but replication, sophisticated filtering, load balancing, tunneling supports, and more.

The 4248-6C includes Niagara Network's FabricFlow technology which is at the core of the system's exhaustive packet broker functionality, responsible for the mapping of traffic flow relationships between source and destination ports.

Open Visibility Platform Enabled

Open Visibility Platform (OVP) technology enables the user to combine advanced network intelligence applications and other 3rd parties virtual machine-based applications² seamlessly integrated with the packet broker functionality.

Advanced network intelligence applications² include such applications as de-duplication, TLS decryption, 4G/5G mobile visibility, and more. Open Visibility Platform is achieved by up to two Packetron processing² modules (up to 200Gb processing) in the rear of the device so that that critical front panel real-estate is not sacrificed.

Product Highlights

High Density

- Up to 48 ports of 10/25Gb plus six ports of 40/100Gb

1U Form Factor

- Reduced footprint, saving power, space and cooling

Switching Fabric

- 2.0Tb Bi-directional

Clustering Capabilities

- Stack any number of units by using any ports to connect between devices

Open Visibility Platform™ Enabled

- Up to 2 rear Packetron™ modules supporting 200G processing
- Network Intelligence applications
- 3rd Party virtual applications

Fabric Flow™



Mapping traffic flow relationships between source and destination ports:

- Aggregate traffic to single port
- Replicate traffic to multiple ports
- Sophisticated filtering - L2-L4, User Defined Byte (UDB)
- Tunnel handling:
 - GTP filtering
 - GRE termination
 - MPLS filtering and stripping
 - VXLAN filtering and stripping
- VLAN support for filtering, stripping and modifying
- Multiple flexible load balancing regimes
 - Layer 2 to Layer 4 hashing criteria
 - Port utilization based load balancing
 - Session stickiness
- Virtual bypass segments for advanced service chaining
- Ingress / egress filtering and internal traffic loopback for efficient creation of sophisticated multi-level filters
- Filter templates for rapid deployment and filter re-use

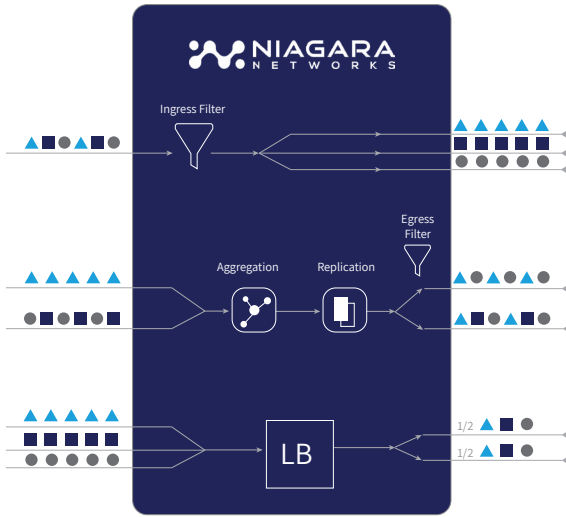
Management

- Robust Command Line Interface (CLI)
- User friendly, Web-based user interface
- REST API for 3rd party integration and support
- Managed by Niagara Visibility Controller
- Support TACACS+, RADIUS, SNMP and NTP

¹ 1Gb rate is supported on 10/25G ports

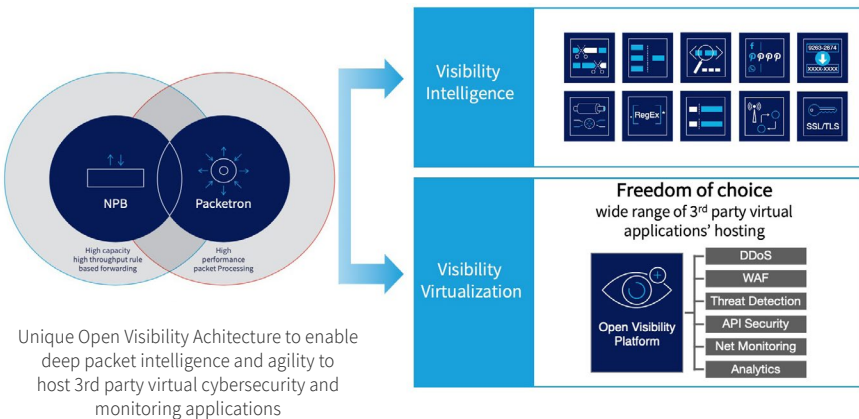
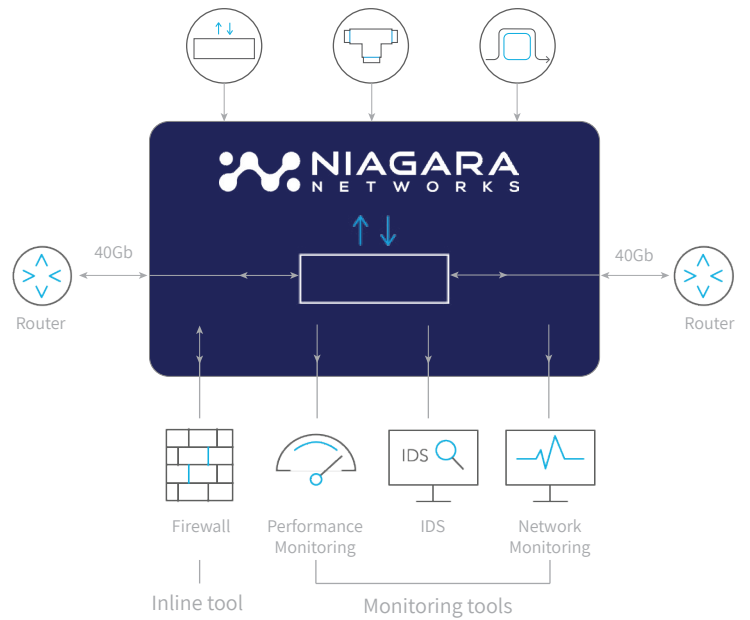
² Packetron hardware and licensing ordered separately- please refer to [Packetron datasheet](#).

Common Use Cases



FabricFlow™ technology for efficient aggregation, replication, filtering and load balancing of traffic.

Protect network from security attacks by sending traffic to inline tools like a firewall (using virtual segment configuration) and also send a copy to monitoring tools for performance analysis.



Advanced Network Intelligence and 3rd party virtual applications hosting.

Integrated Packetron modules offer a wide selection of Network Intelligence applications, including Deduplication, Data masking, Application Filtering, RegEx filtering, NetFlow/IPFIX generation 4G/5G mobile visibility, and more.

| Specifications | | | |
|--------------------|---------------------|-------------|--|
| Height | 1.75 in (44.45 mm) | Max Power | 332 Watts (up to 575.2W with rear Packetron modules installed) |
| Length | 24.0 in (609.6 mm) | Airflow | Front to back |
| Width | 17.3 in (439.42 mm) | DC | 40-60V DC, 20-15A |
| Weight | 25.6 lb (11.4 kg) | AC | 90-264V AC, 50-60Hz, 8-4A |
| Operating Temp | 32-104°F (0-40°C) | Max Current | 10A @ 115V AC |
| Operating Humidity | 5-95% | | 5A @ 230V AC |
| | | | 14.38A @ 40V DC |

| Emissions | Immunity |
|---------------------------------|----------|
| FCC Part 15B, ICES 003, EN55032 | EN55024 |

| Safety | Certifications |
|---|---|
| UL/CSA 60950-1, EN 60950-1, IEC 60950-1, UL 62368 CB Scheme with all country differences | North America (NRTL) European Union (EU) VCCI (Japan) 2014/35/EU Low Voltage Directive 2014/30/EU EMC Directive 2011/65/EU RoHS Directive 2012/19/EU WEEE Directive |

| Part Number | Description |
|---------------|--|
| 4248-6C-MN-AC | 4248-6C main chassis AC, includes two field replaceable power supply units. OVP Enabled for up to 2 rear Packetron modules (sold separately). Includes License for 48 ports of 10/25Gb and 6 ports of 40/100Gb Transceivers sold and ordered separately. |
| 4248-6C-MN-DC | 4248-6C main chassis DC, includes two field replaceable power supply units. OVP Enabled for up to 2 rear Packetron modules (sold separately). Includes License for 48 ports of 10/25Gb and 6 ports of 40/100Gb Transceivers sold and ordered separately. |
| FXD-PKTRN-A-S | Packetron processor acceleration module. Up to 100Gbps processing. Includes Packet Slicing software licensing. 64GB RAM. 512GB SSD- Please refer to Packetron datasheet . |

About Niagara Networks

Niagara Networks provides high performance network visibility solutions for seamless administration of security solutions, performance management and network monitoring. Niagara Networks products provide advantages in terms of network operation expenses, downtime, and total cost of ownership. A former division of Interface Masters, Niagara Networks provides all the building blocks for an advanced Visibility Adaptation Layer at all data rates up to 100Gb, including TAPs, bypass elements, packet brokers and a unified management layer. Thanks to its integrated in-house capabilities and tailor-made development cycle, Niagara Networks are agile in responding to market trends and in meeting the customized needs of service providers, enterprise, data centers, and government agencies. For more information please visit us at www.niagaranetworks.com

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