

## Modular External Active Bypass for Gigabit Ethernet

The Niagara 2299 is a Modular Active Bypass switch. Active bypass functionality ensures seamless failover, while TAP capabilities provide traffic monitoring. Incorporating extensive management capabilities, Niagara 2299 provides maximum flexibility and scalability by offering four independent Gigabit Ethernet interface segments with multiple media combinations including copper, single-mode fiber, multi-mode fiber, multi-mode fiber to single-mode fiber conversion and copper to fiber conversion options. Intelligent bypass also enables plug-and-play connectivity, includes an auto heartbeat and requires no additional drivers to be installed on connected appliances. Niagara 2299 guarantees uninterrupted network connectivity on each of its four segments in instances of power failures or system crashes.



IT managers and Service Providers that manage Inline systems like Deep Packet Inspection (DPI), Intrusion Detection & Prevention, Unified Threat Management, WAN acceleration, Firewall, Load balancing, and VPN gateway devices can utilize Niagara 2299 to proactively disconnect Network Appliances for maintenance or replacement. This ensures that hardware/firmware can be updated or new rules and signatures can be loaded without network downtime.

The 2299 provides flexible and intuitive CLI and GUI management features including a secure web GUI, SSH, SNMP, e-mail notification for system events, and extensive bypass configuration.

Niagara 2299 is capable of interfacing with authentication servers like TACACS+. In addition, the bypass system possesses notification support, enabling consolidation of log data from various systems into a central repository.

## Product Highlights

### Essential features

- Active switching of traffic in case of system failure
- Passive Bypass which is essential during power loss
- Plug and play – no additional drivers required on inline devices
- 10/100/1000 TX (Copper), SX Gigabit (Multi mode) & LX
- (Single mode) Support
- Supports 1, 2, 3 or 4 segment options per 1U system
- Flexible Deployment options including Copper, Multi-Mode, Fiber, Single-Mode Fiber and Copper-to-Fiber Conversion
- TAP functionality for passive traffic monitoring
- Redundant Power supplies for maximum reliability

### Highly reliable

- Niagara 2299 utilizes two redundant external power supplies for maximum reliability
- Niagara 2299 deploys passive bypass along with active switching for fail safe operation

### Certifications

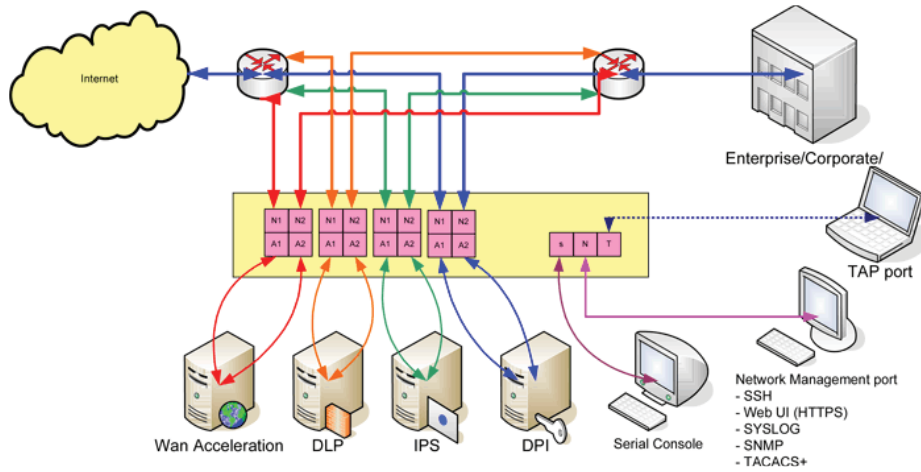
- Full RoHS compliance
- FCC Class A, CE, UL

### Extensive bypass configuration

- Bypass - fail open or fail close
- Bypass heartbeat custom configurations including:
  - Heartbeat pattern
  - Heartbeat frequency
- Bypass on link loss
- Configuration of the number of heartbeat losses prior to activating the bypass
- Configuration of the number of heartbeats prior to disabling the bypass

### Management software

- Web based management via a secure HTTPS connection
- Extensive CLI interface
- SSH connectivity over the management port
- SNMP traps on defined events
- E-mail notification on defined events
- TACACS+ authentication
- Syslog notification support



Environmental		Dimensions	
Operating Temperature	0 to 40°C or 32 to 104 °F	Length	12in (279.4mm)
Operating Humidity	5 to 95%	Height	1.75in (44.5mm)
Maximum power consumption	Less than 47 W	Width	16.75in (425.5mm)
Airflow	100 lf/m		

## 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.