

## Plug and Play

Niagara 2932-4XL is a 4 port 40 Gigabit 32 Port 10 Gigabit Specialized Switch. The Niagara 2932-4XL is an advanced switching and routing system providing Layer 2 switching, IP v4/v6 routing, QoS support and management capabilities. The system is built for optimal flexibility enabling multi-mode or single mode fiber media configuration and connectivity to 40GE, 10GE or 1GE networks via QSFP, SFP+ or SFP connectors. The unit's management functionality can be utilized via an extensive web GUI or CLI which enables flexibility and multiple configurations.

The Niagara 2932-4XL is designed to integrate with UTM, Firewall, WAN Acceleration, QoS, IPS, IDS and Enterprise and Datacenter IT security appliances. The Niagara 2932-4XL provides layer 2/3/4 40 and 10 Gigabit Ethernet enterprise and datacenter capabilities. Layer 2 switching, IP v4/v6 routing, QoS and management capabilities.

The System is based on Marvell Prestera switch family supporting 1GE, 10GE and 40GE technology with multiple ports. The System supports front to back and back to front airflow which is factory configurable.



## Target Applications

The comprehensive feature set is well suited for a range of applications including:

- Carrier Ethernet and Metro Ethernet devices
- Datacenter switching applications
- IP-DSLAMs, blade servers
- Managed Ethernet switches
- MTU or MDU premises switches

## Management

- SNMP (v1, v2c, v3) agent and MIB support; configuration save / restore
- CLI (Console, Telnet, SSH), pre-defined CLI commands
- WebUI (HTTP and HTTPS / SSL), pre-defined web pages
- Software and configuration upgrade through TFTP or SFTP
- Syslog – client (with reliable syslog delivery) and relay
- TCP/IP stack for IPv4 and IPv6 (including ARP, ICMP, ND, UDP)
- DHCP (client, server, relay) for IPv4
- Stateless DHCP service for IPv6 for specific options assignment
- RADIUS client
- TACACS+ client
- RMONv1, RMONv2, DSMON
- IP authorized managers
- Ethernet port control and management
- Traffic mirroring
- SNTP (Simple Network Time Protocol) client
- Chassis management
- Switch stacking

## Basic Layer 2 switching

- Transparent bridging

- VLAN aware bridging with GARP, GVRP, GMRP
- Rapid Spanning Tree Protocol
- Multiple Spanning Tree Protocol
- Per VLAN Rapid Spanning Tree Protocol (enhanced) – PVRST+
- IGMP snooping
- IGMP filtering
- IGMP Proxy
- MLD snooping
- Link Aggregation with LACP
- 802.1x authentication
- Link Layer Discovery Protocol (LLDP)
- Ethernet OAM – 802.3ah
- MRP (Multiple Registration Protocol)

## Routing

- IPv4 unicast - static routing, RIP v1/v2, OSPFv2, IS-IS, BGP4
- IPv4 multicast – IGMP router, PIM-SM/DM, DVMRP
- IPv4 – NAT (Network Address Translation) – unicast and multicast
- IPv6 unicast - static routing, RIP v6, OSPFv3, IS-IS, BGP4+
- IPv6 multicast – MLD, PIMv6
- Route redistribution between IPv4 routing protocols and static routes
- Route maps for filtering route advertisements and route redistribution – IPv4 and IPv6
- IPv6 tunneling over IPv4 – IPv4 and IPv6
- Graceful restart for BGP, BGP4+, IS-IS, OSPFv2, OSPFv3
- Hot standby redundancy for OSPFv2, OSPFv3, PIM for IPv4/v6
- Virtual routing with IPv4/v6 static routing, OSPFv2/v3, IS-IS for IPv4, RIPv2
- VRRP for router redundancy

## Advanced Layer 2 Switching, MPLS /VPLS

- Q-in-Q VLAN tunneling and Provider bridging
- MPLS - static LSPs, LDP, RSVP-TE, PWE3 VCs for L2 VPNs

## QoS (dependent on silicon support)

- ACLs (Access Control Lists) for traffic filtering
- 802.1p, DiffServ, traffic prioritization queuing, policing, shaping
- Rate limiting and storm control
- Flow control and priority flow control
- Enhanced transmission selection

## Highly Reliable

Niagara 2932-4XL utilizes two redundant removable power supplies for maximum reliability.

Niagara 2932-4XL utilizes advanced design and power efficiency techniques for optimal operation.



Linux Operating system	Chassis management, Stacking		Management - CLI (console / Telnet / SSH) / WebUI (HTTP / SSL) / SNMPv3 / Radius / TACACS+
	System management, config save / restore, DHCP-IPv4, Stateless DHCP for IPv6, RMONv1/v2, DSMON, Syslog, Mirroring, SNTF, software upgrade		
	MPLS	ACL, QoS, Flow Control, Priority Flow Control, Rate Control, Storm Control, Enhanced Transmission Selection	
	Layer 3 suite - IPv4 & IPv6, RIP, RIPv6, OSPF, OSPFv3, BGP4, IGMP, MLD, PIM, DVMRP		
Layer 2 suite - VLAN, RSTP/MSTP, GVRP / MVRP, GMRP / MMRP, LA, LACP, IGMP / MLD snooping, EOAM, LLDP			

## Environmental

Operating Temperature	0 to 55 °C or 32 to 131 °F
Operating Humidity	5 to 95%
Maximum Power Consumption	156.7 Watts
Airflow	100 lf/m

## Dimensions

	mm	inches
Length	440.182	17.33
Width	440.182	17.33
Height	44.45	1.75

## Product Line

- Network Interface Cards with Bypass
- Network Interface Cards without Bypass
- External Bypass Products
- SSL/IPSec Cards
- Embedded Switches
- Embedded Platforms
- Development Tools
- TAP Systems

## About Us

Interface Masters Technologies is a leading vendor in the high speed networking market including Bypass, TAP, switches and smart NICs products, based in the heart of the Silicon Valley. Interface Masters' expertise lies in Gigabit, 10 Gigabit and 40 Gigabit Ethernet networking solutions that integrate with monitoring, inline networking, IPS, UTM, Load Balancing, WAN acceleration, and other mission-critical IT and security appliances.

Flagship product lines include hardware load-balancers, specialized 10GE internal server adapter cards, switches, 10 Gigabit external intelligent Network TAP and Bypass and failover systems that increase network monitoring capabilities, network reliability and inline appliance availability.

Company Headquarters are located in San Jose, CA with satellite offices in Hong Kong and Europe.



## Contact Interface Masters

227 Devcon Dr., San Jose, CA 95112  
 Phone: 408-441-9341 x122  
 Fax: 815-364-0888  
 Email: [sales@interfacemasters.com](mailto:sales@interfacemasters.com)  
 Web: [www.interfacemasters.com](http://www.interfacemasters.com)

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TECHNOLOGIES

Innovative Network Solutions