



# HSP-IO-24GE4XS-C2AH

## 24-Port Non-PoE L2 Managed (24x1 GE access + 4x1/10 GE uplink)

### Overview

Fully Managed L2 Switch with wire speed Non-Blocking Architecture

All Gigabit Ethernet Access Ports with 10G Uplinks in a fixed 1U configuration

24 1G Access ports with PoE and Non-PoE Options

4x1/10G Uplink Ports that allow termination on either fiber or copper based on SFP module

Multiple Power Supply options (Single, Redundant) to choose from

Upto 128 Gbps Switching capacity and up to 64 Gbps of Full-Duplex Throughput

PoE Variants Suitable in an enterprise/telco environment to connect end PoE clients like Wi-Fi AP, CCTV, P2P, P2MP, IoT etc.

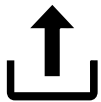
Non PoE Variants Suitable as access or aggregation switch in Enterprise / Campus / Telco Environment

# Key Feature Highlights



## All Gigabit Ports

Access ports with both PoE and Non-PoE options. Support Auto MDIX as well as Auto Negotiation



## 10G SFP Uplinks

10G SFP Uplinks that support both the copper and fiber termination options (based on SFP Module)



## Smart PoE (PoE Variants only)

802.3af/802.3at support on all access ports simultaneously. Smart PoE Capabilities like dynamic and static allocation of power to end host, PoE Port priority, and PoE Traffic Monitor



## Go-Green

Comply with Energy Efficient Ethernet Standards (802.3az)



## Power Supply Flexibility

Power supply with Single & Redundant options



## Secured OS

Powered by fully indigenously developed NiOS with a Security hardened protocol stack and features like L2/L3/L4 ACL, DHCP snooping, Dynamic ARP Inspection, 802.1x Port Security with dACL



## Rich L2 Features

Dual-Stack (IPv4/IPv6) Support, 4K VLAN, 16K MAC, L2 loop avoidance mechanisms like STP/RSTP/MSTP/ERPS, L2 Multicast (IGMP), QoS, Static Routing



## Industry Standard Management

Support secured management access over CLI and Web with built-in scripting and event scheduler framework.

# Technical Specifications

## Switch Ports

- 1 24×10/100/1000 Base-T Gigabit Access Ports
- 2 4×1/10G SFP Uplink Ports with the flexibility to terminate the connection on copper or fiber-based SFP module
- 3 One Serial Console Port
- 4 One RJ45 Management Port
- 5 Link / Speed / LED Status on All ports.
- 6 System status LED

## Switching / Forwarding Capacity

**Switching Capacity** 128 Gbps

**Forwarding Capacity** 95.232 MPPS

## Rich L2 Features

- 1 Support 4094 VLAN IDs, 16K MAC Table, Voice VLAN
- 2 L2 Loop Avoidance – STP/RSTP, MSTP, ERPS, STP Root and Edge Port Protection
- 3 Multicast - IGMP v1/v2/v3 Snooping, IGMP filtering, IGMP proxy
- 4 LACP based LAG and Static LAG with Traffic load share and active-standby policies
- 5 Static Routing & Inter-VLAN Routing, Dual Stack and IPv6 Compliant
- 6 802.1q and QinQ (Port based and Selective), MVRP
- 7 QoS – Up to eight priority queues, Rate Limiting/Policing, CIR/EIR, Shaping (SPQ / WRR/ WFQ), Multi-Field (802.1p / DSCP) Classification and Remarking
- 8 LLDP / LLDP MED to identify end points, IP Phones etc.
- 9 Jumbo MTU upto 9198 Bytes

## Security Features

- L2/L3/L4 ACL
- 802.1X Port Security with Radius CoA, dACL, Accounting & Dynamic VLAN Assignment
- TACACS+ / RADIUS AAA
- DHCP snooping, ARP Inspection, IPv6 ND Inspection
- MAC-IP Anti spoofing, MAC Address Notification
- Inherent DoS Attack Prevention
- Storm Control - Broadcast, Multicast and Unknown Unicast

## Industry Standard Management with Automation

- 1 CLI and GUI options
- 2 Dual Stack (IPv4 and IPv6) Management
- 3 Telnet, SSHv2 and SNMP v1/v2/v3 support
- 4 NTP, FTP, TFTP, SCP, SFTP, Port Mirroring, Traceroute
- 5 DHCP Relay & Client \*
- 6 Built-in Event Policy / Scheduler Framework for Automation
- 7 Zero Touch Provisioning

\* Contact sales representative for use case

## PoE Capabilities (PoE Variants only)

- 1 Each access port comply to 802.3af/802.3at with Max power output of 30W per port
- 2 PoE Budget options: 200W, 370W, 720W
- 3 Smart PoE Capabilities like dynamic and static allocation of power to end host, PoE Port priority and PoE Traffic Monitor

## Power Supply Options

- 1 Single AC Supply
- 2 Redundant Supply options: AC / DC (100V to 240V AC / -44V to 57V DC)

## Other Design Parameters

- Operating Temperature - 0°C to 50°C (Fanless Variants), 0°C to 55°C (Variants with Fans)
- Fans for Cooling (In Modular Power/Fans Variants)
- 1U fixed configuration

## Certifications

- Environment: IEC 600682, QM-333, RoHS
- EMI/EMC: EN 55024, EN 55032, CISPR 24, CISPR 32, IEC 61000-4
- Safety: EN 62368-1, IEC 62695-11-10, IEC 60320-1
- Software: IPV6 Ready Logo Certified