

**OverView:**

24XGigabit RJ45 + 4XGigabit Combo Port Managed Industrial Network Switch L2+ Managed Industrial Ethernet Switch is a multi-port, high-standard Industrial Managed Ethernet Switch independently developed by Houser for industrial ethernet networks. This product adopts industry-leading technical standards and can provide stable and reliable Ethernet transmission with high-quality design and reliability. They are designed in 1RU Rack Mount aluminium housing and have 24 Gigabit Ethernet ports, plus an additional 4 Gigabit Combo Port(SFP/RJ45) providing data uplink and backbone connectivity

**Product Features:**

- All-aluminum Case, Compact and Fanless Design
- -40 to 75°C temperature maintains performance in extreme conditions DIN Rail and wall-mountable - quick to install and remove for maintenance
- Full gigabit L2+ management, easy to manage the industrial network by CLI/WebGUI/NMS.
- Build up a redundant network with STP/RSTP/ERPSv2.
- RADIUS, SNMPv3, IEEE 802.1x, HTTPs, SSHv2 and sticky MAC address to enhance network security
- EherNet/IP and Modbus TCP protocols are supported for device management and monitoring
- Electric 8KV surge protection Complete status indicator, working state at a glance
- Power input polarity protection design, no worry about the wrong operation
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including SP, WRR&SP+WRR

**Ethernet Interface:**

Model: Hop3440S1232-4TP

Ports:

- 4xGigabit Combo(SFP/RJ45)
- 24x10/100/1000M Base-TX

Port Mode(Tx):

- Auto-Negotiation
- Full/Half Duplex Mode
- Auto MDI/MDI-X Connection

Standards:

- IEEE 802.3 for 10BaseT
- IEEE 802.3u for 100BaseT(X) and 100BaseFX
- IEEE 802.3ab for 1000BaseT(X)
- IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
- IEEE 802.3x for flow control
- IEEE 802.1D-2004 for Spanning Tree Protocol
- IEEE 802.1w for Rapid Spanning Tree Protocol
- IEEE 802.1s for Multiple Spanning Tree Protocol
- IEEE 802.1p for Class of Service
- IEEE 802.1Q for VLAN Tagging
- IEEE 802.1X for authentication
- IEEE 802.3ad for Port Trunk with LACP

Packet Buffer Size: 4Mbits

Maximum Packet Length: Up to 10K

MAC Address Table: 8K

Transmission Mode:

- Store and Forward (full/half duplex mode)

Exchange Property :

- Delay time: < 7μs
- Backplane bandwidth: 56Gbps

IGMP Group: 4096

Max. No. of VLAN: 256

VLAN ID Range: VID 1 to 4094

**Power Supply:**

Power Consumption:

- 24 Watts Max

Power Inputs:

- 2

Input Voltage:

- 9-56VDC, Redundant dual inputs

Connector :

- 1 removable 6-contact terminal blocks
- Pin 1/2 for Power 1, Pin 3/4 for Power 2, Pin 5/6 for fault alarm

Protection:

- Overload Current Protection, Reverse Polarity Protection

**Physical Characteristics:**

Housing:

- Aluminium case

IP Rating:

- IP40

Dimensions:

- 400mmx300mmx45mm

Installation:

- Rack Mount

Weight:

- 2600g

**Environmental:**

Operating Temperature:-40°C~75°C (-40 to 167°F)

Operating Humidity:5%~90% (non-condensing)

Storage Temperature:-40°C~85°C (-40 to 185 °F)

MTBF:>250,000@Telcordia(Bellcore)GB

Heat Dissipation: 75 BTU/h

Cooling: Passive Cooling, Fanless Design

Noise Level: 0 dBA

**Ethernet Software Features:**

Redundancy Protocols:

- Support STP/RSTP/MSTP/ERPSv2, Link Aggregation

Multicast Support:

- Support IGMP Snooping V1/V2/V3, support GMRP, GVMP,802.1Q

VLAN:

- Support IEEE 802.1Q 4K VLAN, support QINQ, Double VLAN,

Time Management:

- SNTP

QoS:

- Flow-based redirection
- Flow-based rate limiting
- Flow-based packet filtering
- 8\*Output queues of each port 802.1p/DSCP priority mapping
- Diff-Serv QoS, Priority Mark/Remark
- Queue Scheduling Algorithm (SP, WRR, SP+WRR)

ACL:

- Port-based Issuing ACL
- ACL based on port and VLAN
- L2 to L4 packet filtering, matching the first 80 bytes message.
- Provide ACL based on MAC, Destination MAC address, IP Source, Destination I
- P, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, VLAN, etc

POE Management:

- Total power limit of PoE power supply
- PoE output power allocation
- PoE output priority configuration
- PoE working status
- Scheduling of PoE operation

Diagnostic Maintenance:

- Support port mirroring, Syslog, Ping

Management Function:

- Support CLI, WEB, SNMPv1/v2/v3, Telnet server for management, EEE, LLDP, DHCP Server/Client(IPv4/IPv6), Cloud/MQTT

Alarm Management:

- Support 1-way relay alarm output, RMON, TRAP

Security:

- Broadcast Storm Protection, HTTPS/SSLv3, AAA & RADIUS, SSH2.0
- Support DHCP Snooping, Option 82, 802.1X security access,
- Support user hierarchical management, ACL access control list,
- Support DDOS, port-based MAC filtering / binding, MAC black holes, IP source protection, Port isolation, ARP message speed limit

Advance Layer 2+ Features:

- IPv4/IPv6 Management
- Static Route