

# ALPHA BRIDGE AS200/10/I2S4P Managed Industrial PoE Switch



Wide-range working temperature 800,000 hours MTBF



Advanced Hardware Architecture and Industry-leading Port Density.



IP40 protection 6KV lightning protection



Verified Service characteristics, Versatile IPv6 solution, Complete Security Mechanism.

## Product Overview

The AS200/10/I2S4P is a highly reliable industrial managed PoE Switch with 4-port 10/100/1000-T PoE and 2-port 1000Base-X fiber optical interfaces. It complies with IEEE802.3af, IEEE802.3at standard PoE protocol, the Max power consumption can reach 30W (PoE+) per port. With its high-performance switching capacity, it supports ERPS redundant network and the self-recovery mechanism is less than 20ms on full load which allows you to scheme a reliable Ethernet network by building a redundant ring topology as your back-up solution. AS200/10/I2S4P supports Web/SNMP/Telnet management, the managed features are such as QoS, VLAN, IGMP, Port mirroring, 802.1X, LLDP, Fiber transceiver DDM, PoE management and so on.

AS200/10/I2S4P is also a high cost-effective easy-to-use device,

which provides essential industrial Ethernet networking function, including wide range power input 44-57VDC, redundant power design with polarity reverse protection, robust IP40 fan-less housing with Din-rail installation, wide operation temperature from -40°C to 75°C as well as high-level EMI/EMC capability. It is the best choice for heavy industrial factory, transportation, oil & gas, chemical, IP Surveillance and processing automation area where environmental conditions are harsh and crucial

## Features

- 4\*10/100/1000Base-T RJ45 PoE ports, 2\*1000Base-X SFP ports
- DC 44~57V input, redundant power supply with polarity reverse/over-voltage protection
- Complies with IEEE802.3af PoE and IEEE802.3at PoE+ standard
- Support Layer 2 management function: VLAN/Port Mirroring/IGMP/QoS/LLDP/802.1X/Fiber transceiver DDM
- Support G.8032 ERPS protocol, recovery time ≤20ms
- Support 4KV surge protection and ESD: Air-15kV, Contact-8kV Protection
- IP40 fan-less and Din-rail hardware design
- Operation temperature: -40 °C ~+75°C

## Technical specification

| Model No.                  | AS200/10/I2S4P  |  |
|----------------------------|---|--|
| Interface                  | Fiber ports   | Copper RJ45 ports                      |
|                            | 2   | 4                                      |
| Ethernet                   | 4*10/100/1000Base-T RJ45 PoE<br>2*100/1000Base-X SFP (SC/ST/FC optional)  |  |
| Management port            | 1*RJ45 Console  |  |
| Standard                   | IEEE 802.3 10Base-T<br>IEEE 802.3u 100Base-TX<br>IEEE 802.3ab 1000Base-T<br>IEEE 802.3z 1000Base-X<br>IEEE 802.3x flow control and back pressure<br>IEEE 802.1D spanning tree protocol<br>IEEE 802.1w rapid spanning tree protocol<br>IEEE 802.1Q VLAN tagging<br>ITU-T G.8032 ERPS<br>IEEE 802.1X port authentication network control<br>IEEE 802.1ab LLDP<br>IEEE 802.3ad LACP<br>IEEE802.3af Power Over Ethernet<br>IEEE802.3at Power Over Ethernet plus PSE |  |
| <b>LED Indicators</b>      |   |  |
| P(Power indicator)         | Off: the device is power off or failed  | Off: the device is power off or failed |
| S(System status indicator) | Blinking: device initialization   | On: device on normal operation         |
| 1-4 (Copper ports)         | Green   | Yellow                                 |
|                            | Off:ports link down   | Off: PoE not working                   |
|                            | On: ports link up   | On: PoE working                        |
|                            | Blinking: data on TX/RX   |  |
| 5-6 (fiber ports) Green    | Off: ports link down  |  |
|                            | On: ports link up   |  |
|                            | Blinking: data on TX/RX   |  |
| <b>Power parameter</b>     |   |  |
| Input voltage              | 44-57VDC, redundant power input   |  |
| Input current              | 3A Max  |  |
| Total consumption          | Full loading without PoE ≤6W<br>PoE power budget ≤120W  |  |

|                                    |   |
|------------------------------------|---|
| <b>Connector</b>                   | Removable 4-pin terminal block  |
| <b>Reverse polarity protection</b> | Support   |
| <b>Over-voltage protection</b>     | Support   |
| <b>Layer 2 function</b>            |   |
| <b>Port aggregation</b>            | Support static aggregation<br>Support dynamic aggregation   |
| <b>Port features</b>               | Support IEEE802.3x flow control<br>Support Port traffic statistics<br>Support port isolation<br>Support network storm suppression based on port bandwidth percentage  |
| <b>VLAN</b>                        | Support access mode<br>Support trunk mode Support hybrid mode   |
| <b>Port mirroring</b>              | Support many to one port mirroring  |
| <b>Ring network protocol</b>       | Support STP, RSTP<br>Support G.8032 ERPS protocol, single ring, sub Ring and associated sub ring<br>Recovery time ≤20ms   |
| <b>Multicast</b>                   | IGMP V1,V2,V3<br>IGMP snooping  |
| <b>QoS</b>                         | Ingress Port-based Rate-limit<br>Egress Port-based Rate-limit   |
| <b>Security features</b>           | Support 802.1x, port authentication, MAC authentication, RADIUS service<br>Support port isolation   |
| <b>Management and maintenance</b>  | Support LLDP<br>Support user management and login authentication<br>Support SNMPV1/V2C/V3<br>Support web management, HTTP1.1, HTTPS<br>Support Syslog and alarm grading<br>Support RMON(Remote Monitoring) alarm<br>Support NTP<br>Support Ping , Tracert<br>Support optical transceiver DDM function<br>Support TFTP Client<br>Support Telnet Server<br>Support SSH Server<br>Support IPv6 Management<br>Support PoE management<br>Support TFTP, web upgrading |
| <b>Switching features</b>          |   |
| <b>Switching capacity</b>          | 12Gbps  |
| <b>Packet forwarding rate</b>      | 17.8Mpps  |
| <b>MAC address table</b>           | 8K  |
| <b>VLAN</b>                        | 4K  |
| <b>Buffer</b>                      | 1M bit  |
| <b>Forwarding delay</b>            | <5us  |

|  |   |
|--|---|
| <b>Jumbo Frame</b>                         | Support 10Kbytes  |
| <b>MDX/MIDX</b>                            | Support   |
| <b>Watchdog</b>                            | Support   |
| <b>Mechanical structure</b>                |   |
| <b>Case protection</b>                     | IP40  |
| <b>Installation method</b>                 | Din-rail  |
| <b>Dimension(W*D*H)mm</b>                  | 30*98*130mm   |
| <b>Weight</b>                              | 0.56 kg   |
| <b>Operating environment</b>               |   |
| <b>Operating temperature</b>               | -40°C~+75°C   |
| <b>Storage/transportation temperature)</b> | -40°C~+85°C   |
| <b>Relative humidity</b>                   | Operation humidity: 10%-90%RH<br>Storage humidity: 5%-95%RH                         |
| <b>Industrial Standard</b>                 | Surge protection of power: IEC 61000-4-5      Level 3 (4KV/2KV) (8/20us)            |
|  | Surge protection of Ethernet ports: IEC 61000-4-5      Level 3 (4KV/2KV) (10/700us) |
|  | DIP: IEC 61000-4-11      Level 3 (10V)  |
|  | ESD: IEC 61000-4-2      Level 4 (8K/15K)  |
|  | Shock: IEC 60068-2-27   |
|  | Free fall: IEC 60068-2-32   |
|  | Vibration: IEC 60068-2-6  |

## Ordering Information

| Model                 | Description  |
|-----------------------|--|
| <b>AS200/10/I2S4P</b> | Managed industrial 10/100/1000M 4POE and 2SFP, IEEE802.3af, IEEE802.3at standard, DC44-57V, redundant dual power supply, Din-rail installation. Fiber ports transmission distance depending on the SFP module; Operation temperature: -40°C ~+75°C |

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