

**Model: SUS-5FP2S**  
**Series: SAPPHIRE**



**Fast Ethernet PoE+ Unmanaged Switch – 5\*10/100Tx with 4\*PoE Ports (120W) +  
2\*100/1000 SFP Slot**



## Compact Size for More Practicability and Convenience

AADONA SUS-5FP2S Industrial 5-Port 10/100TX Compact Ethernet Switch, suitable for industrial use, features 5 10/100Mbps with 4/10/100Mbps PoE ports auto-negotiation Ethernet ports and 2 100/1000Mbps SFP ports, IP30-rated rugged but compact case and a wide-ranging redundant power system (48-55VDC). The SUS-5FP2S is able to operate in any harsh environment with operating temperatures ranging from -40 to 75 degrees C. As the trend for an IIoT (Industrial Internet of Things) infrastructure is gradually on demand, the SUS-5FP2S is specially designed to make the deployment of an industrial network easy as it comes with a Plug and Play feature. Besides, it is stable and reliable when it comes to fast data and power transmission.

## Low Power Consumption for Green Networking

The SUS-5FP2S, adopting the advanced green networking technology, provides the link-on cable length power saving and link-down power-saving methods. These features make the SUS-5FP2S consume very low power in full-load operation mode, which helps conserve energy effectively but maintains high performance efficiently. With the Auto Power Saving and IEEE 802.3az Energy Efficient Ethernet (IEEE) Protocol, the SUS-5FP2S can automatically detect cable link status and network traffic, and thus is able to adjust power consumption accordingly. It enables the switch to consume less power when it is less active. Dual Power Input for High Availability Network System.

The SUS-5FP2S features a strong dual power input system with wide-ranging voltages (48-55 VDC) incorporated into customer's automation network to enhance system reliability and uptime. In the example below, when power supply 1 fails to work, the hardware failover function will be activated automatically to keep powering the SUS-5FP2S via power supply 2 alternatively without any loss of operation.

## High Switch Performance

The SUS-5FP2S offers a high-performance switch architecture. With the 5 10/100Mbps Fast Ethernet ports providing non-blocking switch fabric and wire-speed throughput and the 8K MAC address table, the SUS-5FP2S can perform wire-speed packet transfer without the risk of packet loss. The flow control function enables the SUS-5FP2S to provide fast and reliable data transfer.

## Plug and Play

All of the RJ45 copper interfaces in the SUS-5FP2S support 10/100Mbps auto-negotiation for optimal speed detection through RJ45 Category 5 or 5e cables. The standard auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

## Fiber-Optical Link Capability Enables Extension of Network Deployment

The two SFP slots are compatible with 100Base-FX or 1000Base-SX / LX through SFP (Small Form Factor Pluggable) fiber-optic transceivers. The fiber optical uplink capability guarantees the throughput to all nodes hooked into the network and the Ethernet distance can be extended from 550 meters (Multi-Mode fiber cable) up to 10/20/30/40/50/70/120 kilometers (Single-Mode fiber cable), also the Fast Ethernet distance can be extended from 2km (Multi-Mode fiber cable) up to 20/40/60 kilometers (Single-Mode fiber cable). They are well suited for applications within the factory data centers and distributions.

**Key features:**

- 4-port 10/100Tx Ethernet with IEEE 802.3at Compliant PoE+
- 1-port 10/100Tx Fast Ethernet
- 2-port 100/1000 SFP Slot
- Redundant Power Input Design, 48-55VDC
- Built-in Relay Output Warning for Power Failure
- IP30 Rugged Metal Case Design
- DIN-Rail Mounting, Wall Mounting
- Operating Temperature Range - STD: -10°C ~ 65°C, EOT: -40°C ~ 75°C

**Application****Industrial-grade PoE+ Switch for Building Automation and Security**

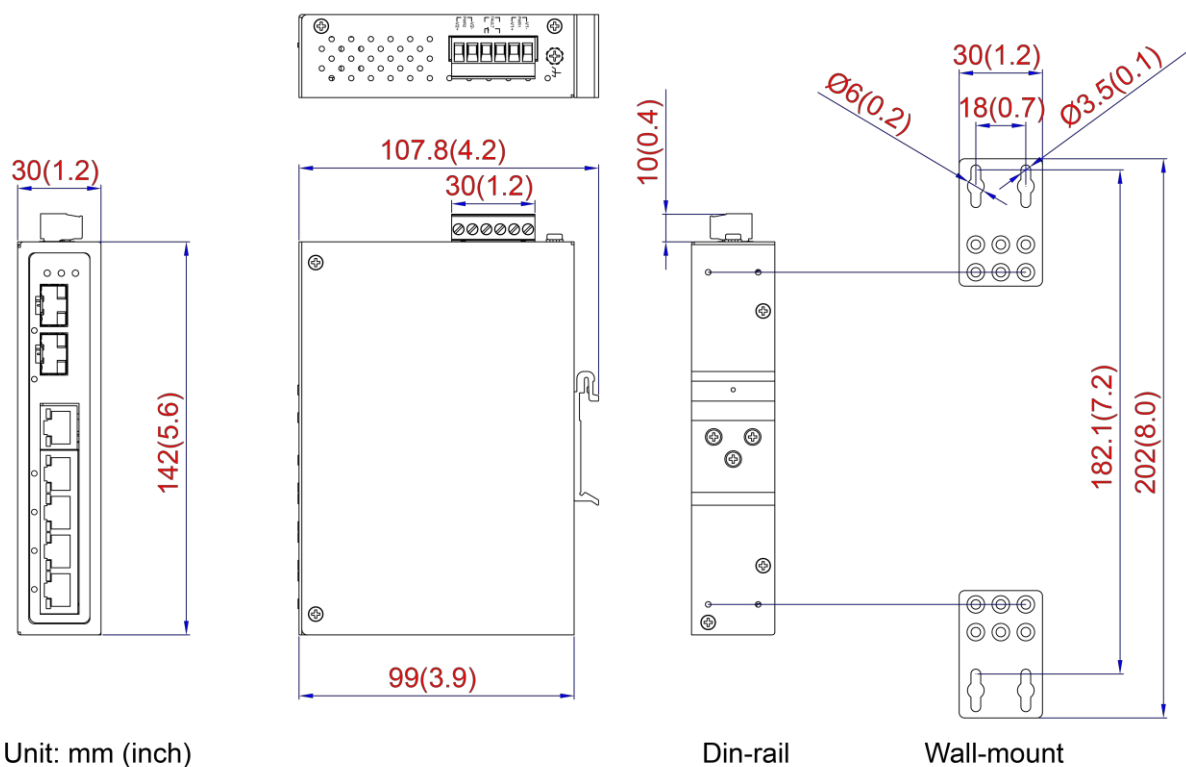
Suitable for buildings where security is strictly enforced, the SUS-5FP2S, with four Fast Ethernet 802.3at PoE+, in-line power interfaces, can easily build a power that can centrally control an IP phone system, IP surveillance system, and wireless AP group in the harsh Industrial environment. For instance, 4 PoE IP cameras or PoE wireless APs can be easily installed for surveillance demands or a wireless roaming environment in the industrial area can be built. Without the power-socket limitation, the SUS-5FP2S makes the installation of IP cameras or wireless APs easier and more efficient.

**Perfect Integration Solution for IP PoE Camera and NVR System**

The SUS-5FP2S provides four 10/100BASE-TX 802.3at PoE+ ports which can offer sufficient PoE power to 4 PoE IP cameras at the same time. In addition, with the 10/100BASE-TX interfaces, the SUS-5FP2S can connect to a core fiber switch and send video streams to an NVR and monitoring center. Through the high-performance switch architecture, the SUS-5FP2S facilitates the recorded video files from the 4 PoE+ IP cameras to be saved in the NVR systems. Furthermore, the NVR systems can be controlled and monitored in both the local LAN and the remote site via Internet. The SUS-5FP2S undoubtedly brings an ideal secure surveillance system at a lower total cost.

**Redundancy Application**

The SUS-5FP2S Industrial PoE+ Switch provides rapid fiber redundancy of link for highly critical Ethernet applications. The redundant-mode supports auto-recover function. If the destination port of a packet is link down, it forwards the packet to the other port of the backup pair.



Unit: mm (inch)

Din-rail

Wall-mount

### Technology

Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3z 1000Base-X Gigabit Fiber IEEE 802.3af/at Power over Ethernet
Processing Type	Store and Forward
Protocol	CSMA/CD
Flow Control	IEEE 802.3x flow control, back pressure flow control

### Switch Properties

Switching Fabric(Back-Plane)	5Gbps
Memory Buffer	4Mbits
MAC Table Size	8K
Jumbo Frame	9.6Kbytes
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port

### Interface

RJ45 Ports	5*10/100 Base-T(X) with 4* PoE+ Auto-Negotiation, Full/Half Duplex, Auto-MDI/MDI-X
PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6 (Endspan, MDI Alternative A)
Fiber Port	2*100/1000 SFP slots
Wavelength	Depends on SFP modules
LED Indicators	System: Power 1, Power 2, Fault Ethernet ports: On-Link/Flash-data transmitting SFP: Link/Active PoE : On-connected to PD devices
Relay Contact	24 VDC, 1A resistive
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m)

### Power Requirements

Input Voltage	Dual 48-55VDC redundant power inputs
Power Connection	1 removable 6-contact terminal block
Overload Current Protection	Present (Slow-Blow Fuse)
Reverse Polarity Protection	Present
System Power Consumption	Max. 9W full loading
PoE Power Output	30Watts max. per PoE port
Max. PoE Power Budget	100W/48VDC, 120W/55VDC

### Mechanical Characteristics

Housing	Metal, IP30 protection
Dimensions (W x H x D)	30 x 142 x 99 mm (1.2 x 5.6 x 3.9 inch)
Weight	Unit weight: 0.578kg (1.27lb), Shipping weight: 0.724kg (1.59lb)
Mounting	DIN-Rail Mounting, Wall Mounting

### Environmental Limits

Operating Temperature	STD: -10°C ~ 65°C (14°F ~ 149°F) EOT: -40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5 to 95%, (non-condensing)

### Regulatory Approvals

Safety and Certifications	CE, EN, LVD, RoHS EN61000-4-5 (for RJ45 Port, Surge 6KV) EN 55032:2015 EN 55024:2010 + A1:2015 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 60950 – 1:2006 ISO Standard: ISO 9001:2015 ISO 14001:2015 ISO 27001:2013
MTBF (Telcordia SR-332, Issue 3, GB, 25°C)	866,424 hrs.
Warranty	5 Years

**NOTE: Due to continuous improvement, all product specifications are subject to change without further notice.**



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