

# 4N-IPS1208G-2F

12 Port Industrial Managed PoE Switch



## Product Overview

It is equipped with 8 × 10/100/1000Base-T PoE RJ45 ports, 2 × 10/100/1000Base-T uplink RJ45 ports, and 2 × 100/1000Base-X SFP fiber uplink slots.

Port 1–8 support IEEE 802.3af/at PoE standard, with a maximum PoE output power of 30W per port.

Each port supports wire-speed forwarding, ensuring stable and high-performance data transmission in industrial network environments.

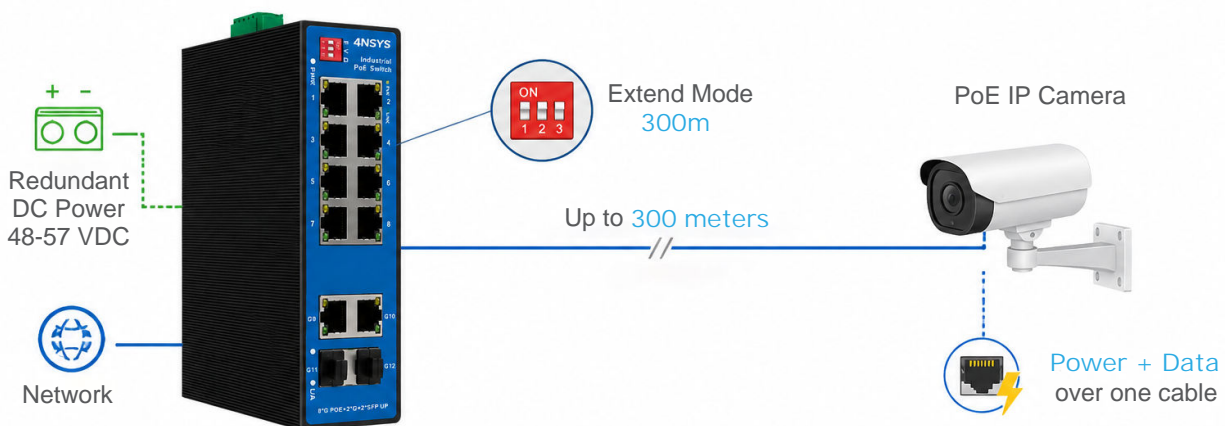
The 4N-IPS1208G-2F supports AI PoE Watchdog, VLAN isolation, Extend mode transmission up to 300 meters, port priority, and intelligent PoE power management, improving network reliability and reducing maintenance costs.

Designed with industrial-grade components, the switch supports redundant dual DC power input, wide operating temperature from -40°C to +85°C, IP40 protection, and DIN-Rail installation.

It is suitable for industrial automation, intelligent transportation systems, surveillance networks, rail transit, energy, and other harsh industrial environments.

## Extend Mode Transmission up to 300 Meters

Enable Extend Mode, the PoE port support up to 300 meters



# FEATURE

## Gigabit access, SFP fiber port uplink, Integrated Bypass function

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support Extend Mode transmission up to 300 meters over Cat5e/Cat6 Ethernet cable, suitable for long-distance IP surveillance and industrial PoE applications.

## Network management and fast ring function

- STP/RSTP/MSTP.
- Static and dynamic aggregation.
- IEEE802.1Q VLAN, flexible VLAN division, Access, Trunk and Hybrid.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- IGMP Snooping V1/V2/V3 meets multi-terminal high-definition video surveillance and video conference access requirements.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.

## Security

- 802.1X authentication.
- Port isolation, storm control.
- IP-MAC-VLAN-Port binding.

## Stable and reliable

- CCC, CE, FCC, RoHS.
- Low power consumption, No fan, aluminum shell.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A.

## One-stop remote control and management

- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.
- Web management, CLI command line, SNMP (V1/V2/V3).

Model	4N-IPS1208G-2F	
<b>Interface Characteristics</b>		
Fixed Port	8*10/100/1000Base-T PoE ports (Data/Power) 2*10/100/1000Base-T RJ45 ports (Data) 2*100/1000Base-X SFP slot ports (Data) 2 set of V+, V- redundant DC power interface (5 Pin Phoenix terminal)	
Ethernet Port	Port 1-8 support 10/ 100/ 1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption	
Feature	E: AI Extend Mode supports long-distance PoE transmission up to 300 meters for IP cameras and PoE devices, while maintaining stable Gigabit uplink performance for the remaining ports.	
SFP Slot Port	Gigabit SFP optical fiber interface, default matching optical modules, (optional order mode / multi-mode, single fiber / double fiber optical module.	
Wavelength/Distance	multimode: 850nm 0~550M, 1310nm 0~2KM single mode: 1310nm 0~40KM , 1550nm 0~120KM	
<b>Chip Parameter</b>		
Network Management Type	L2+	
Ring network	Supports ERPS ring network function, with a maximum number of rings of 5 and a convergence time of <20ms	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-X, IEEE802.3z 1000Base-X, IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	24 Gbps (Non-blocking)	
Buffer Memory	17.85 Mpps	
MAC	8K	
LED Indicator	PowerIndicatorLight	P: 1 Green
	Fiber Indicator Light	F: 1 Green (Link,SDFED)
	On the PoE seat	Yellow:Indicate PoE
		Green: Indicates network working status
Reset Switch	Yes, Press and hold the reset switch for 5s and release it to restore the factory settings	

PoE characteristics	
power supply	48V/120W or 48V/240W industrial power supply
PoE power supply method	Supports 1,2+, 3,6-power supply
PoE output power	Each port has a power supply of 15.4W and a maximum power of 30W per port
Certification & Warranty	
Lightning Protection	<p>Lightning protection: 6KV 8/20us, Protection level: IP40</p> <p>IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge</p> <p>IEC61000-4-3(RS):10V/m(80~ 1000MHz)</p> <p>IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV</p> <p>IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV</p> <p>IEC61000-4-6(radio frequency transmission):10V( 150kHz~80MHz)</p> <p>IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m , 1s to 3s</p> <p>IEC61000-4-9(pulsed magnet field):1000A/m</p> <p>IEC61000-4- 10(damped oscillation):30A/m 1MHz</p> <p>IEC61000-4- 12/ 18(shockwave):CM 2.5kV,DM 1kV</p> <p>IEC61000-4- 16(common-mode transmission):30V; 300V, 1s</p> <p>FCC Part 15/CISPR22(EN55022):Class B</p> <p>IEC61000-6-2(Common Industrial Standard)</p>
Mechanical Properties	<p>IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock)</p> <p>IEC60068-2-32 (free fall)</p>
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Physical Parameter	
Operation TEMP /Humidity	-40~+75°C;5%~90% RH Non condensing
Storage TEMP /Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension (L*W*H)	165mm* 145mm*52mm
Installation	Desktop, DIN rail

L2 functions	
Port configuration	Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor Traffic statistics
Link Aggregation	Static link aggregation LACP Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP
ACL	256ACLs L2, L3 e L4 Time-based ACL
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN
QOS	port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port
DHCP	SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload Dual Firmware LLDP

Security Features	<p>Port Security MAC address filter</p> <p>ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection</p> <p>DoS (Denial of Service)</p> <p>Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type;</p> <p>802.1x Authentication (port-based e MAC-based)</p> <p>TACACS/TACACS+ Authentication</p> <p>RADIUS Authentication</p> <p>DHCP Filter</p> <p>Guest VLAN</p> <p>SSLv2/SSLv3/TLSv1</p> <p>SSHv1/SSHv2</p> <p>Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection</p>
Other Features	<p>DNS Client DHCP</p> <p>Relay DHCP Client</p> <p>DHCP Snooping</p> <p>DHCP Option 82</p> <p>SNTP Client</p> <p>UDLD</p>
PoE management	<p>Soft-Reboot PoE Non-stop Total PoE</p> <p>Per port PoE function enable/disable PoE classification detection</p> <p>PD alive check</p> <p>PoE schedule</p>
Maintenance	<p>Cable Diagnostics</p> <p>Ping</p> <p>SFP DDM(Digital Diagnostics Monitoring) Thermal protection</p> <p>System log (Local and Remote)</p> <p>Memory and CPU Monitoring</p>
L3 functions	<p>IPV4 Equal Cost Routing</p> <p>NG protocol, maximum 1000 entries</p> <p>ARP protocol, maximum 1000 entries</p> <p>Pingv6, Telnetv6, TFTPv6, DNSv6, ICMPv6</p> <p>IPV4/IPV6 VRRP, the maximum group is 255</p> <p>IPV4/IPV6 VLANIF interface supports up to 128</p> <p>IPV4/IPV6 static route/default route supports up to 128 entries</p> <p>L3 network management function, IPV4/IPV6 dual-stack management</p> <p>Layer 3 routing and forwarding, support communication between different network segments and different VLANs</p>



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