

# Smart Giga L2 PoE Switch with 2-Port Giga SFP and 8-Port Giga PoE

## IDP410G-8GP

**10-port L2+ Managed PoE Switch with 8xGiga PoE, 2 x 100/1000M SFP**

The IDP410G-8GP is a **lite industrial Layer 2+ PoE switch** designed for **essential industrial, automation, and surveillance applications**. It features **8 Gigabit PoE+ ports** and **2 100/1000M SFP uplinks**, providing **reliable and efficient network connectivity**.

With **Surveillance VLAN, LLDP-MED, VLANs, ACL/QoS, and essential security features**, it optimizes network performance. **ERPS and STP/RSTP/MSTP** ensure basic redundancy for uninterrupted operation.

Easily managed via **Web, CLI, SNMP, and Telnet**, it is built for **lite industrial environments** with a **durable metal housing, 6KV surge protection, IP40 rating, dual DC power, and fanless operation**. The IDP410G-8GP delivers **stable, high-speed, and PoE-enabled networking** for essential applications.



### Hardware Features

- **2 Optical Uplink Ports:** Supports long-distance transmission and simplifies networking for ring or chain topologies.
- **Full Gigabit Speed:** Ensures high-bandwidth stability with per-port rate and flow control, enabling long-distance network cable transmission to meet diverse user needs.
- **Industrial-Grade Chip:** High-bandwidth switching chip with a robust backplane and large cache reduces network congestion.
- **Intelligent Flow Control:** Supports IEEE802.3X full-duplex flow control for smooth, lag-free HD transmission.
- **Advanced Port Features:** Automatic MAC address learning and updating, plus Auto MDI/MDI-X functionality for seamless connectivity.
- **Enhanced Protection:** Service ports include 6KV anti-surge protection, plus power short-circuit and overload safeguards for secure use.
- **Durable Build:** Aluminum alloy shell ensures excellent heat dissipation, interference shielding, rust resistance, and long-lasting durability.
- **Flexible Power Options:** Dual DC redundant power supply (DC48-57V) meets industrial wide-voltage requirements.
- **Industrial Design:** IP40-rated, DIN rail mounting, and wide temperature range (-25°C to +70°C) provide stability in harsh environments.
- **Energy Efficient:** Low power consumption with fanless, silent operation for easy installation and maintenance.

### Extreme PoE Capability

- 8-port IEEE 802.3af/at compliant PoE technology, up to 30W per port
- IEEE 802.3af/at adaptive
- Output Voltage: DC 48-57V

### Software Features

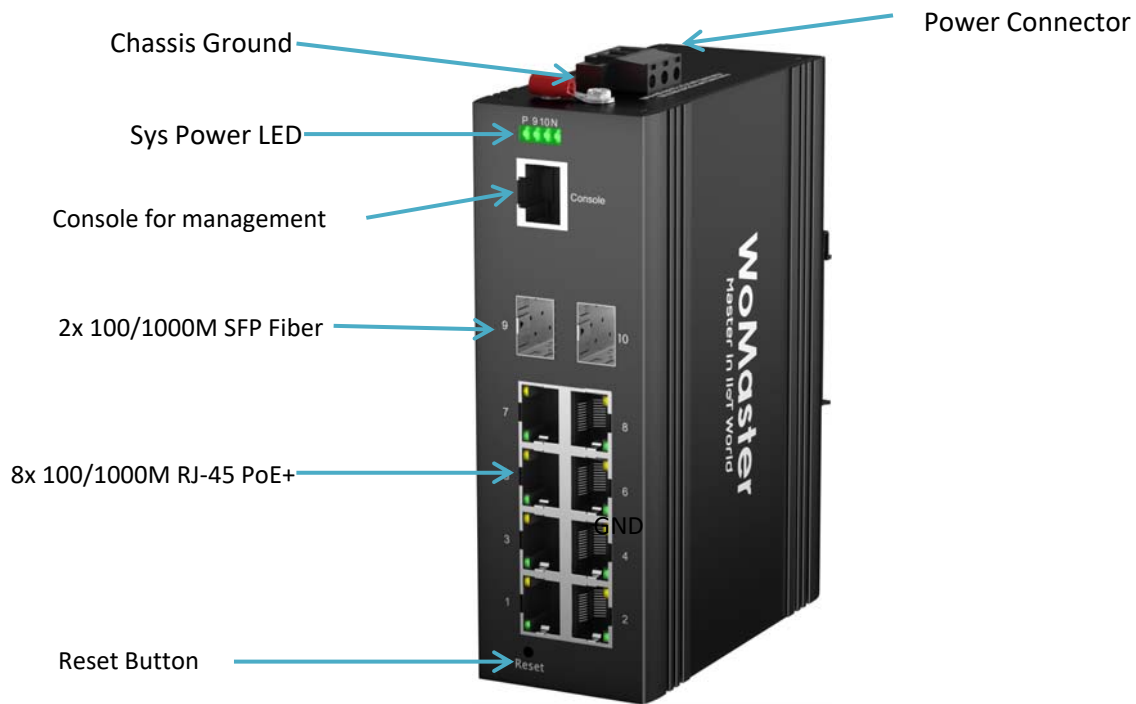
- **IPv4 Static Routes:** Supports up to 32 static routes and 1024 ARP entries for efficient routing and address resolution.
- **Advanced Port Management:** Offers flexible bandwidth and traffic configuration with optical port DDMII diagnostics for precise network management.
- **Comprehensive VLAN Support:** Includes IEEE 802.1Q, protocol VLAN, and QinQ VLAN for flexible VLAN configuration based on user needs.
- **Quality of Service (QoS):** Features three priority modes (port-based, 802.1P, and DSCP) and four queue scheduling algorithms (Equ, SP, WRR, SP+WRR) to optimize traffic handling.
- **Access Control Lists (ACLs):** Provides customizable security policies with rule-based filtering, processing actions, and time-based permissions for enhanced network protection.
- **Multicast Protocols:** Supports IGMP V1/V2 and IGMP Snooping V1/V2/V3 for seamless multi-terminal HD video surveillance and conferencing.
- **Redundancy Protocols:** Supports ITU-T G.8032 v1/v2 ERPS Standard Ring Redundancy protocol and STP/RSTP/MSTP for loop elimination, link backup, and network stability.
- **Link Aggregation:** Supports static and dynamic (LACP) aggregation for higher bandwidth, load balancing, link redundancy, and reliability.

### Security Features

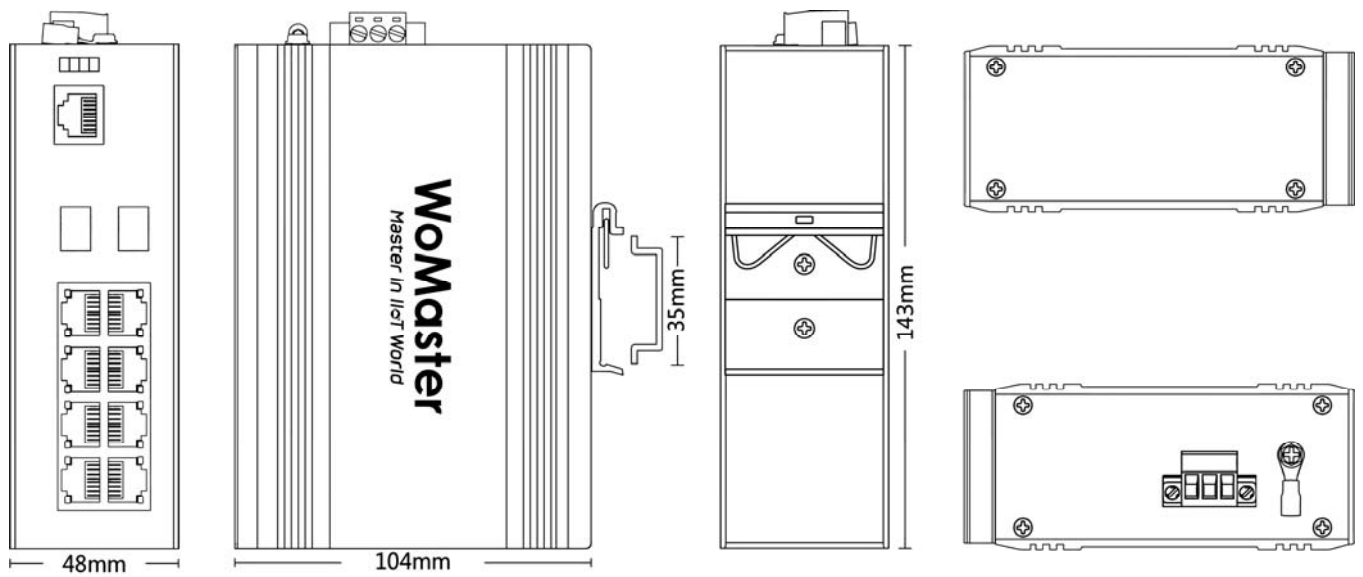
- **User Authentication:** Supports WEB interface authentication for secure access.
- **CPU Protection:** Prevents large data stream attacks on the switch for enhanced stability.
- **Advanced Authentication Protocols:** Supports 802.1x, remote RADIUS, and TACACS+ authentication for robust access control.
- **Comprehensive ACL Support:** Hardware supports IP ACL, MAC ACL, port filtering, MAC address binding, and multi-factor binding (IP+MAC+VLAN+Port) for enhanced security.
- **Enhanced Network Control:** Features DHCP Snooping V1/V2/V3, port isolation, and broadcast storm suppression for reliable and secure network operation.



## Interfaces



## Dimensions



Technology	
Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3u 100Base-FX Fast Ethernet Fiber
	IEEE 802.3ab 1000Base-T Gigabit Ethernet Copper
	IEEE 802.3z Gigabit Ethernet Fiber
	IEEE 802.3x Flow Control and back-pressure
	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
	IEEE 802.1p Class of Service (CoS)
	IEEE 802.1Q VLAN
	IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP)
	IEEE 802.3ad Link Aggregation Control Protocol (LACP)
	IEEE 802.1X Port based Network Access Protocol
Performance	
Switch Technology	Store and Forward Technology with Non-Blocking Switch Fabric
Number of MAC Address	8K
Packet Buffer Memory	4.1M bits
Transfer performance	10Base-T: 14,880pps, 100Base-TX/FX: 148,800pps, 1000Base-TX/FX: 1,488,100pps
Jumbo Packet	10KBytes
Interface	
Ethernet Port	8 x 10/100/1000Base-T RJ45 802.3af/at PoE, Auto-Negotiation, Auto MDI/MDIX 2x 100/1000M SFP slots
System LED	1 x Power, 1 x SYS
Ethernet Port LED	1000M: Link (Green On, Amber On), Activity (Green Blinking) 100M: Link (Green On, Amber Off), Activity (Green Blinking)
Reset	Default Settings Reset(over 7 Seconds)
Console	1 x RS232 in RJ45 for System Configuration. Baud Rate: 115200.n.8.1
Power Input	3-Pin Removable Terminal Block Connector for Redundant Power
Power Requirement	
Input Voltage	48VDC (48~57VDC)
Reverse Polarity Protect	Yes
Power Consumption	no PoE:<10W;with PoE:<250W
PoE	
Power forwarding mode	802.3at Alternative A
PoE Power Budget	Max PoE Power Budget: 240W
PoE Standard	IEEE 802.3at PoE+, IEEE 802.3af PoE
Management	PoE Status, PoE Scheduling
Software	
IP Routing	L2+ network management functions. IPV4 static routes/default routes with up to 32 entries ARP protocol with a maximum of 1024 entries
VLAN	port-based VLANs (4K),IEEE802.1q VLANs, protocol-based VLANs Access, Trunk, and Hybrid port configurations.
Port Aggregation	static aggregation and dynamic aggregation (LACP) up to 8 aggregation groups, each aggregation group supports up to 8 ports

<b>Redundancy</b>	STP/RSTP/MSTP spanning tree protocols ITU-T G.8032 v1/v2 Ethernet Ring Protection Switching (ERPSv2) (single-ring, multi-ring, intersecting ring and tangent ring configurations), ring self-healing time less than 20ms
<b>IGMP, Mirroring</b>	IGMP Snooping v1/v2/v3 and up to 1024 multicast groups. bi-directional traffic mirroring on basic ports
<b>DHCP</b>	DHCP Server, DHCP Client, DHCP Snooping v1/v2/v3
<b>QoS</b>	port-based, 802.1P and DSCP/ToS prioritization, and supports 8 output queues per port. Four priority scheduling modes: Equ, SP, WRR, SP+WRR. Priority Mark/Remark, Flow-based rate limiting, packet filtering, redirection
<b>ACL</b>	L2 to L4 packet filtering function and provides ACLs defined based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN, etc. Port-based and VLAN-based ACL issuance
<b>Security</b>	Hierarchical management and password protection, Port-based IEEE802.1X authentication AAA & RADIUS with TACACS+ authentication, MAC address learning number limit, MAC address blacklist, address binding, SSH 2.0 encrypted channel for user login, Port isolation, ARP message speed limit function, IP source address protection, ARP intrusion detection, Anti-DoS attacks, Port broadcast message suppression, Host data backup/restore mechanism, IP+MAC+VLAN+Port Quad Binding
<b>Management</b>	Web-based, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), HTTP, TFTP file upload/download, RMON 1, 2, 3 and 9 groups, one key to restore factory settings NTP clock and local clock, local logs and system logs (SYSLOG), Ping detection, cable status checking, instant CPU utilization status, Link Layer Discovery Protocol LLDP, NMS (LLDP+SNMP)

#### Mechanical

<b>Installation</b>	DIN-Rail
<b>Enclosure Material</b>	Steel Metal
<b>Dimension</b>	48x143x104 (W x H x D) / without DIN Rail Clip
<b>Ingress Protection</b>	IP40
<b>Weight</b>	~0.55Kg with no package

#### Environmental

<b>Operating Temperature &amp; Humidity</b>	-25°C~70°C, 5% to 95% RH non-condensing
<b>Storage Temperature</b>	-40°C~85°C, 5% to 95% RH non-condensing
<b>MTBF</b>	100,000 hours
<b>Warranty</b>	3 Years

#### EMC&INGRESS PROTECTION

<b>Surge</b>	Power: Common mode: 4KV; Differential-Mod: 2KV Ethernet Port: Common mode: 4KV; Differential-Mod: 2KV
<b>ESD</b>	Contact: 8KV; Air: 15KV
<b>Free Fall</b>	0.5m



#### Ordering Information

Model Name	Description
<b>IDP410G-8GP</b>	Din-rail 10-port L2+ Managed PoE Switch with 8xGiga PoE and 2x100/1000M SFP
	<b>Package List</b>
	1 x Product Unit (Without SFP Transceiver)
	1 x 3-pin Removable Terminal Block Connector
	1 x Attached Din Clip
	1 x Quick Installation Guide



## Optional Accessory

SFPGEM05DT	1000M	550M	Multi	SFP, 1000Mbps, LC, multi, DDM, 550M, -40~85°C
SFPGES10DT	1000M	10KM	Single	SFP, 1000Mbps, LC, single, DDM, 10KM, -40~85°C
SFPGES30DT	1000M	30KM	Single	SFP, 1000Mbps, LC, single, DDM, 30KM, -40~85°C
SFPXGM03D	10G	300M	Multi	SFP+, 10Gbps, LC, multi-mode, DDM, 300M, 0~70°C
SFPXGM03DT	10G	300M	Multi	SFP+, 10Gbps, LC, multi-mode, DDM, 300M, -40~85°C

SDR-480P-48	Din Rail Power Supply INPUT:90-264VAC, 120-370VDC, OUTPUT: 48VDC/10A, -25 ~ +70°C
NDR 480-48	Din Rail Power Supply INPUT:90-264VAC, 120-370VDC, OUTPUT: 48VDC/10A, -20 ~ +70°C