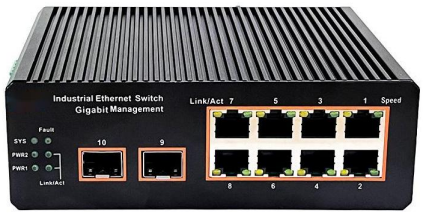
SMN-SU5/SA5

Industrial Ethernet Switches

- Provides self-adaptive 10/100/1000M RJ45 PoE+ ports and Gigabit SFP fiber ports.
- High EMC protection level, resistant to various harsh environments.
- Easy-to-use WEB visual management interface.
- Aluminum alloy shell, sturdy and durable.
- Dual power input with redundant backup, greatly enhancing power supply reliability.



The SMN-SU5/SA5 Series offers a flexible range of gigabit Ethernet switches, designed for industrial applications in demanding environments. The series includes both managed and unmanaged models, with options for PoE and non-PoE configurations.

Built for robust environmental resilience, the series offers mechanical stability, climate and electromagnetic compatibility, with an IP30 protection rating. Redundant power inputs enhance reliability, while the fanless design ensures low power consumption.

Managed models come with advanced features like 802.1Q VLAN, voice VLAN, QoS, ACL, IGMP V1/V2/V3, IGMP Snooping, 802.1X authentication, STP/RSTP/MSTP, ERPS rapid ring protocol (20ms recovery time), AAA authentication, and SNMP management. The SMN-SU5/SA5 Series is perfect for deploying stable, cost-effective communication networks across industries such as smart transportation, power, mining, oil, maritime, and green energy.

Synway R&D Building, No.3756, Rd. Nanhuan., Binjiang District, Hangzhou, P.R.China 310053
Tel: (86) 571 88860561 | Fax: (86) 571 88850923 |Email: info@synway.net

Key features:
Installation Method: DIN Rail Mount
Protection Level: IP30, reduces dust impact
Industrial-grade operating temperature: -40° C to 75° C
8K MAC addresses; static MAC addresses, MAC address filtering, dynamic MAC binding for address table management
MAC address auto-learning, auto-aging, and aging time settings
IEEE 802.1Q VLAN, flexible VLAN segmentation based on user needs
Voice VLAN for QoS configuration, prioritizing voice data flow and ensuring call quality
QoS: Supports port-based, 802.1P-based, and DSCP-based priority modes, with queue scheduling algorithms including Equal, SP, WRR, SP+WRR
ACL: Filtering of data packets through configurable matching rules, actions, and time permissions, providing flexible security access control policies
IGMP V1/V2 multicast protocol, supports IGMP Snooping to meet HD video surveillance and video conferencing needs
Multicast VLAN and multicast filtering for efficient data transmission, bandwidth saving, and reduced network load
802.1X authentication for LAN computer access, with port authorization control based on authentication results
STP/RSTP/MSTP spanning tree protocols to eliminate Layer 2 loops and enable link redundancy
ERPS rapid ring protocol with a recovery time of 20ms (currently supports single ring only)
Ingress/egress bandwidth control based on port
Static and dynamic link aggregation for increased link bandwidth, load balancing, link redundancy, and improved link reliability
Web management, CLI (Console, Telnet), SNMP (V1/V2/V3) for diverse management options
Secure management with HTTPS, SSL V3, TLSV1, SSHV1/V2 encryption
RMON, system logs, and port traffic statistics for network optimization and improvements
Cable detection, Ping, and Tracert tests to easily analyze network faults
LLDP for network management systems to query and assess link communication status
CPU monitoring, memory monitoring, Ping, Tracert tests, and cable detection

Technical Specifications:	
Protocol Standards	IEEE 802.3, 802.3i, 802.3u, 802.3x, 802.3af, 802.3at
Switch Performance	Store-and-forward support; MAC address table depth: 8K
DIP Switch	Not defined yet, customizable options available
Structure	IP30 protection level; DIN rail/wall mountable
Net Weight/Gross Weight	≤1kg / ≤1.4kg
Switching Capacity	20Gbps
Forwarding Rate	14.88Mpps
Buffer	4.1Mb
Operating Temperature	-40° C to 75° C
Storage Temperature	-40° C to 85° C
Humidity	Operating humidity: 10%RH to 90%RH, non-condensing; Storage humidity: 5%RH to 90%RH, non-condensing
Packaging Accessories	1 SR-SHG3210FPI industrial-grade switch, warranty card, user manual

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Software Parameters:	
L2 Switching Features	8K MAC address table, 10K jumbo frames, Flow control (802.3x, Backpressure), IEEE 802.1D (STP), IEEE 802.1w (RSTP), IEEE 802.1s (MSTP), Edge port, BPDU filter, ERPS, Self-loop detection, Link aggregation (Static, LACP), Traffic load balancing.
L3 Switching Features	IPv4/IPv6 Static routing, ARP (Static ARP).
VLAN	Supports 4094 VLANs, IEEE 802.1Q VLAN, Protocol-based VLAN, MAC-based VLAN, Surveillance VLAN, Voice VLAN, QinQ (IEEE 802.1ad), GARP VLAN Registration Protocol (GVRP).
Multicast	Supports 500 multicast groups, IGMP (v1/v2/v3), IGMP Active Query, MLD Listening, IPv4 Multicast VLAN Registration (MVR).
Quality of Service (QoS)	8 priority queues/ports, Queue scheduling (WRR, WFQ, Strict priority, Hybrid WRR+SP or WFQ+SP), Port-based rate limiting, Trusted QoS.
Access Control List (ACL)	L2/L3/L4 ACL types (MAC, IPv4, IPv6).
Security	AAA authentication, 802.1x, TACACS+, SSLv2/SSLv3/TLSv1, CLI SSH v1/v2, Storm control, BPDU protection, Port isolation, DHCP Snooping, Dynamic ARP inspection, DoS prevention, IP/MAC/Port Binding (IMPB).
IPv6 Host	Auto-configuration, Static IPv6 address, IPv6 Neighbor Discovery (ND), Duplicate Address Detection, ICMPv6.
IPv6 Applications	Supports HTTP/HTTPS, Remote Network, SSH, SNMP, TFTP, System Logs, PING, DHCPv6.
Management	CLI, HTTP, HTTPS, SNMP management (V1/V2/V3), File management (Firmware upgrade/backup), Port management, DHCP client, RMON, IEEE (802.3az).
Discovery	IEEE 802.1AB Link Layer Discovery Protocol (LLDP), ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED).
Diagnostics	System logs, CPU/memory/port/utilization diagnostics, Port diagnostic cable test, Fiber module status, Ping/Traceroute, UDLD.
MIB	RFC1213 MIBII, RFC2819 RMON I, SNMPv3-MIB, RFC1215 trap, RFC1493 Bridge MIB, RFC2737, RFC3635, RFC2863 Interface group, RFC2674 Bridge MIB Extensions.

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Recommended Switch Models:

Industrial Switch

Model	RJ45 Ports	Fiber Ports	PoE	Key Features
SWN-SU5-42N	4	2	No	DIN Rail Mounting, DC12~52V Power Supply, Wide Temp -40℃~85℃, Ring Network (STP/RSTP), VLAN
SWN-SU5-42P	4	2	Yes	65W Total Power, SFP, DIN Rail Mounting, DC48~52V, Wide Temp -40℃~85℃, Ring Network, VLAN
SWN-SU5-82N	8	2	No	DIN Rail Mounting, DC12~52V Power Supply, Wide Temp -40℃~85℃, Ring Network, VLAN
SWN-SU5-82P	8	2	Yes	120W Total Power, IEEE802.3 af/at, SFP, DIN Rail Mounting, DC48~52V, Wide Temp -40℃~85℃, Ring Network, VLAN

L2 Industrial Switch

Model	RJ45 Ports	Fiber Ports	PoE	Key Features
SWN-SA5-42N	4	2	No	DIN Rail Mounting, DC12~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-42P	4	2	Yes	65W Total Power, IEEE802.3 af/at, SFP, DC48~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-82N	8	2	No	DIN Rail Mounting, DC12~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-82P	8	2	Yes	120W Total Power, IEEE802.3 af/at, SFP, DC48~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-84N	8	4	No	DIN Rail Mounting, DC12~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-84P	8	4	Yes	120W Total Power, IEEE802.3 af/at, SFP, DC48~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-88N	8	8	No	DIN Rail Mounting, DC12~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP
SWN-SA5-88P	8	8	Yes	120W Total Power, IEEE802.3 af/at, SFP, DC48~52V, Wide Temp -40℃~85℃, Ring Network, VLAN, WEB/CLI, SNMP

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