

L3 managed Ethernet Switches

- Full Gigabit Access: All ports support 10/100/1000 Mbps with optional 10G fiber uplinks.
- High-Power PoE Support: IEEE 802.3af/at/bt compliant, up to 90W per port on select models.
- Industrial Design: Operates in -40°C~80°C temperature range, with 6kV surge protection and redundant DC/AC power.
- Advanced L3 Routing: Static routing, RIP, OSPF, VRRP, DHCP relay.
- L2/L3 Features: VLAN, QinQ, STP/RSTP/MSTP, ERPS, IGMP/MLD Snooping, ACL, port isolation, port mirroring, link aggregation.
- Secure & Flexible Management: Access via Web GUI, CLI, SNMP v1/v2/v3, Telnet, SSH, and centralized DCMS platform.



The Synway SMN-SA3 series Layer 3 managed switches offer high-performance full-gigabit access and 10G uplinks, designed for enterprise, campus, surveillance, and industrial networking. Supporting a broad range of L3 routing protocols and industrial-grade reliability, these switches provide superior scalability, security, and centralized management through DCMS platform, Web UI, CLI, and SNMP.

Key Highlights:

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Application Scenarios:

- Aggregation in enterprise/government networks
- IP camera and video surveillance
- Industrial automation and smart cities
- High-speed Wi-Fi access point backhaul
- Campus and hospitality network deployment

Software Specification:

Category	Feature Description
Protocol Standards	IEEE 802.3/3u/3ab/3z/3ae, IEEE 802.1Q/p/w/s/x/ad/az, IEEE 802.1x
MAC Address Table	Supports up to 32K entries, automatic update, bidirectional learning
VLAN Configuration	Supports 802.1Q VLAN, QinQ, Voice VLAN, MAC VLAN, IP VLAN, up to 4096 VLANs
Spanning Tree	STP, RSTP, MSTP, ERPS (recovery <20ms), BPDU Guard
Port Aggregation	Supports static/dynamic LAGs, 8 groups max
Port Mirroring	Multi-to-one bidirectional mirroring supported
Loop Protection	Loop detection and auto-recovery supported
Port Isolation	Downlink port isolation with uplink forwarding allowed
Port Flow Control	Half-duplex (backpressure), Full-duplex (PAUSE frame)
Bandwidth Management	Per port input/output rate limiting
Multicast Control	IGMP v1/v2/v3, MLD v1/v2 Snooping, GMRP, multicast VLAN
DHCP	DHCP Client/Server/Relay/Snooping supported
Storm Suppression	Supports suppression for unicast/multicast/broadcast
Security	IP/MAC binding, port security, ARP inspection, ACL (IP/MAC/Layer 3/4), RADIUS, 802.1X
QoS	802.1p CoS/ToS tagging, WRR, SP, WFQ, RED/WRED, traffic classification
Cable Detection	Auto-MDIX supported
Auto Negotiation	Supported for all ports
System Maintenance	Config upload/download, firmware upgrade, logs, ping/tracert, cable detection
PoE Management	Port power on/off, schedule, auto detection (for PoE models only)
Network Management	Web GUI, CLI, Telnet, SSH, SNMP v1/v2/v3, RMON, LLDP, DCMS
Clock Protocols	NTP, PTP (1588v2) supported
Reliability	Redundant power input (DC/AC), surge protection, MTBF >300,000 hrs

Recommended Switch Models:

Model	Bandwidth	Ports	Fiber Ports	PoE	Description
SWN-SA31-0802NA	160G	8GT	2*10G SFP+	No	Standard enterprise L3 access layer configuration
SWN-SA31-0502NA	160G	5GT	2*10G SFP+	No	Compact, high-performance L3
SWN-SA31-0008NA	160G	None	8*10G SFP+	No	Pure fiber aggregation/core model
SWN-SA31-0206NDX	160G	2XGT	6*10G SFP+	No	Data center or uplink core
SWN-SA31-0800NA	160G	8GT	None	No	Basic L3 pure Ethernet configuration
SWN-SA31-0500NA	160G	5GT	None	No	Entry-level L3, cost-optimized choice

Note: All models support VLAN, IGMP Snooping, QoS, Port Isolation, Link Aggregation, ACL, SNMP, and centralized cloud-based DCMS management.