

Series 5 Commercial Gigabit PoE+ AI Switch

SIL 53224P-AI



Commercial Gigabit PoE+ Managed Switch with AI

OVERVIEW

The SilverNet SIL 53224P-AI is a high-performance, commercial-grade Gigabit PoE+ switch designed to provide stable and reliable Ethernet transmission for modern network deployments.

Equipped with 24 × 10/100/1000Base-T PoE+ ports and 2 × Gigabit SFP uplink ports, the SIL 53224P-AI delivers flexible connectivity for IP cameras, wireless access points, VoIP phones, and intelligent building systems.

This model features a fanless, noiseless design, low power consumption, and a durable IP30 metal housing, ensuring long-term reliability in commercial environments.

The SIL 53224P-AI supports the IEEE802.3af/at PoE standard, providing up to 30W per port with a total PoE budget of 350W. AI-assisted DIP-switch functions provide enhanced automation:

- AI VLAN – isolates PoE ports from each other
- AI Extend – extends PoE transmission up to 250m (10 Mbps)
- AI QoS – prioritises video and VoIP traffic
- AI PoE – automatically resets unresponsive PDs

With robust PoE output, stable Gigabit performance, and intelligent automation, the SIL 53224P-AI is ideal for hotels, campuses, factories, dormitories, and small-to-medium enterprises.

Features

- 24 × 10/100/1000Base-T PoE+ ports
- 2 × Gigabit SFP uplink ports56Gbps bandwidth
- 52 Gbps switching backplane bandwidth
- IEEE802.3af/at PoE compliant
- Auto negotiation speed, half/full duplex
- Store and forward
- Max packet size: 10K bytes
- MAC address size: 8K
- AI VLAN, AI Extend, AI QoS, AI PoE
- Energy Efficient Ethernet
- Operating temperature: 0 °C to +50 °C
- 4 kV surge protection
- Fanless, passive cooling (0 dBA noise)
- Metal IP30 housing
- Rack-mountable

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Technical Specifications

Part No.	SIL 53224P-AI
Ethernet Interface	
Ports	24×10/100/1000M Base-TX RJ45 2 x Gigabit SFP
Port Mode (Tx)	Auto Negotiation Full/Half Duplex Mode Auto MDI/MDI-X Connection
SFP Port Transmission	1G multimode/single-mode modules
RJ45 Port Transmission	Up to 100 m (CAT5/CAT5e)
Standards	IEEE 802.3 10Base-T, 802.3u 100Base-TX, 802.3ab 1000Base-T, 802.3z 1000Base-X, 802.3x flow control, 802.1p CoS, 802.3az EEE
Packet Buffer Size	4Mbits
Maximum Packet Length	Up to 10K
MAC Address Table	8K
Transmission Mode	Store and Forward (full/half duplex mode)
Exchange Property	Delay time: < 7μs Backplane bandwidth: 52Gbps
Physical Characteristics	
Housing	Metal
IP Rating	IP30
Dimensions	440mm×300mm×45mm
Installation	Rack Mount
Weight	4000g
Environmental	
Operating Temperature	0°C ~ 50°C
Operating Humidity	5%~90% (non-condensing)
Storage Temperature	-20°C ~ 70°C
MTBF	100,819@Telcordia SR-332 GB 25°C
Cooling	Passive Cooling, Fanless Design
Noise Level	0 dBA
Power Characteristics	
PoE Ports	Port 1-24
Power Supply Pin	Default: 1/2(+), 3/6(-)
Max Power Per Port	IEEE802.3 af/at 30W
Total PWR	350W
Power Consumption	< 18 W (no PoE load)
Power Inputs	1
Input Voltage	Internal power adapter with AC100 – 240V 50-60Hz input
Connector	AC: 3 Pin AC Socket
Protection	Overload Current Protection, Reverse Polarity Protection

Additional Features

Part No.	SIL 53224P-AI
AI Features	
DIP #1 - AI VLAN	Isolates PoE ports; uplink-only communication
DIP #2 - AI Extend	Extends PoE up to 250 m at 10 Mbps
DIP #3 - AI QoS	Prioritises video/VoIP traffic
DIP #4 - AI PoE	Auto-detects inactive PDs and resets power
Standards	
Lightning Protection	Lightning protection: 4kV 8/20us
Certification	CE mark, commercial, CE/LVD EN60950, FCC Part 15 Class , RoHS
Warranty	3 years, lifetime technical support
Package Contents	
Device	1x Ethernet Switch
Cable	1x AC Power Cable
Installation Kit	2x Rack-Mount Kits
Documentation	1 x Quick Start guide

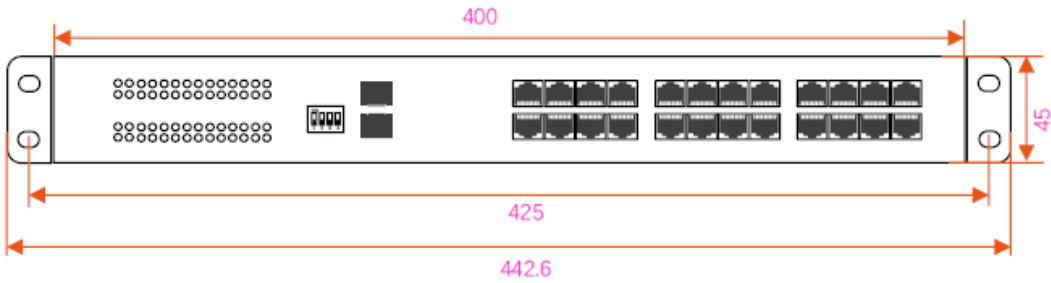
Dimension Diagrams

Dimensions

Unit: mm



Top View



Front View

Part Numbers & Accessories

Series 5 Commercial 1G/10G Switches

Part Code	Description
SIL 53224P-AI	24GE + 2 x 1G SFP, PoE+
Commercial 10G	
SIL 54224MP	24GE + 4 x 10G SFP+ ports, PoE+

1G/10G Fibre Transmission

Part Code	Description
SIL-01-25-X850-0-5D	1G Multimode 850nm SFP, DDM, Duplex LC Connector, 550m
SIL-01-25-X131-10XD	1G Singlemode 1310nm SFP, DDM, Duplex LC Connector, 10km
SIL-01-25-X131-40XD	1G Singlemode 1310nm SFP, DDM, Duplex LC Connector, 40km
SIL-01-25-X155-80XD	1G Singlemode 1550nm SFP, DDM, Duplex LC Connector, 80km
SIL-08-10-X850-0-3D	10G Multimode 850nm SFP+, DDM, Duplex LC Connector,300m
SIL-08-10-X131-02XD	10G Multimode 1310nm SFP+, DDM, Duplex LC Connector, 220m
SIL-08-10-X131-10XD	10G Singlemode 1310nm SFP+, DDM, Duplex LC Connector, 10km
SIL-08-10-X155-80XD	10G Singlemode 1550nm SFP+, DDM, Duplex LC Connector, 80km
BiDi	
SIL-01-25-B131-10XD	1G SM SFP 1310nm TX FP 10km with DDM, LC, 1550nm RX
SIL-01-25-B155-10XD	1G SM SFP 1550nm TX FP 10km with DDM, LC, 1310nm RX
SIL-01-25-B139-10XD	1G SM SFP 1310nm TX FP 10km with DDM, LC, 1490nm RX
SIL-01-25-B149-10XD	1G SM SFP 1490nm TX FP 10km with DDM, LC, 1310nm RX
SIL-08-10-B127-10XD	10G SM SFP+ 1270nm TX FP 10km with DDM, LC, 1330nm RX
SIL-08-10-B133-10XD	10G SM SFP+ 1330nm TX FP 10km with DDM, LC, 1270nm RX
SIL-08-10-B127-40XD	10G SM SFP+ 1270nm TX FP 40km with DDM, LC, 1330nm RX
SIL-08-10-B133-40XD	10G SM SFP+ 1330nm TX FP 40km with DDM, LC, 1270nm RX
SFP to Ethernet	
SIL-01-25-XXXT-0-1	1G RJ45 Copper SFP, 100m
SIL-08-10-XXXT-0-03	10G RJ45 Copper SFP, 30m

* Series 5 Commercial Switches are mains powered by IEC connector