

Series 5 Commercial Managed 1G Network Switch

SIL 534C24MP

Commercial Gigabit PoE+ Managed Switches



OVERVIEW

The SilverNet Commercial Gigabit PoE+ Managed Switch is a fully managed layer 2 switch that provide stable and reliable Ethernet transmission.

The Commercial Gigabit PoE+ Managed Switch comes with, 24 x 10/100/1000Base-T ports with 4 x Gigabit Combo ports (TP + SFP).

The Commercial Gigabit PoE+ Managed Switch has no fan, low power consumption and high reliability.

The SilverNet Commercial Gigabit PoE+ Managed Switch is ideal for expanding your business network. The switch has configurable Layer 2 network features such as VLANs, PoE Scheduling, IGMP snooping and more.

The SilverNet Commercial Gigabit PoE+ Managed Switch is fully compliant with the IEEE802.3af/at standard, providing Power-over-Ethernet over twisted pair cables.

It delivers great performance for growing networks and are ideal for use with VoIP phones, IP cameras and wireless access points.

Features

- 24 x 10/100/1000Base-T
- 4 x Gigabit Combo (TP + SFP)
- 56Gbps bandwidth
- IEEE803.af/at compliant
- RJ45 supports auto MDI/MDI-X function
- Auto negotiation speed, half/full duplex
- Store and forward
- Max packet size: 10K bytes
- MAC address size: 8K
- IGMP Snooping
- SNMP Web Management Interface
- Port Mirroring
- Supports IPv6 Protocol
- Loop protection
- Link Layer Discovery Protocol (LLDP)
- Operating Temperature (0°C ~+50°C)
- Electric 4KV surge protection
- Rack mountable

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Distributed By:

Technical Specifications

Part No.	SIL 534C24MP
Ethernet Interface	
Ports	24×10/100/1000M Base-TX RJ45 4 x Combo Gigabit (TP + SFP)
Port Mode (Tx)	Auto Negotiation Full/Half Duplex Mode Auto MDI/MDI-X Connection
SFP Port Transmission	Multi-mode: 850nm/0-500M, Single-mode:1310nm/0-40km, 1550nm/up to 120km
RJ45 Port Transmission	100m (using standard CAT5/CAT5e cable)
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseSX/LX/LHX/ZX IEEE 802.3x for flow control IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1p for Class of Service IEEE 802.1Q for VLAN Tagging IEEE 802.1X for authentication IEEE 802.3ad for Port Trunk with LACP
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: 56Gbps; Packet Forwarding Rate:47.616Mpps
IGMP Group	4096
Max. No. of VLAN	256
VLAN ID Range	VID 1 to 4094
Physical Characteristics	
Housing	Metal
IP Rating	IP30
Dimensions	440mmx300mmx45mm
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	480W
Power Consumption	24 Watts Max (without 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 534C24MP
Software Features	
Management Interface	CLI, WEB, SNMPv1/v2/v3, Telnet server for management, EEE, LLDP, DHCP Server/Client(IPv4/IPv6), Cloud/MQTT
Management	ARP, Flow Control, DDM, DHCP Server/Client, IPv4/IPv6, LLDP, LLDP-MED, UDLD, Port Mirror, RMON, SNMPv1/v2c/v3, Syslog, Telnet
File Management	Firmware Upgrade/Backup, Dual Images, Configuration Download/Backup, Multiple Configuration, TFTP(RFC783), HTTP, UART
Multicast Support	802.1Q, GMRP, GVRP, IGMP Snooping v1/v2/v3
Redundant Network	Link Aggregation, STP/RSTP/MSTP/ERPSv2
VLAN	Support IEEE 802.1Q 4K VLAN, QinQ, Double VLAN
Time Management	SNTP
QOS	Flow-based redirection Flow-based rate limiting Flow-based packet filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL Type	Port-based Issuing ACL ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Diagnostic Maintenance	Support port mirroring, Syslog, Ping
POE Management	Total power limit of PoE power supply PoE output power allocation, on/off with at/af PoE output priority configuration PoE working status Scheduling of PoE operation
Security	Broadcast Storm Protection, HTTPS/SSLv3, AAA & RADIUS, SSH2.0 Support DHCP Snooping, Option 82, 802.1X security access, Support user hierarchical management, ACL access control list, Support DDOS, port-based MAC filtering / binding, MAC black holes, IP source protection, Port isolation, ARP message speed limit
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	1xDB9 female to RJ45 10-pin AC Power Cable
Installation Kit	2x Rack-Mount Kits
Documentation	1 x Quick Start guide

Standard Features

STANDARD FEATURES

Physical Ports

RJ45 with Auto MDI/MDI-X and Auto-negotiation
SFP 100/1000Base-X

SIL 534C24MP

24-port 10/100/1000Base-T with PoE+ and 4-
combo ports TP + SFP 100/1000Base-X

Power over Ethernet

Complies with IEEE 802.3af / IEEE 802.3at Power
over Ethernet
IEEE 802.3af / 802.3at / devices powered
Supports PoE power up to 30.8 Watts for each PoE port
Auto detect powered device (PD)
Circuit protection helps reduce power interference
between ports
Remote power feeding up to 100m
PoE Management features
IEEE 802.3af and IEEE 802.3at mode switch control
Total PoE power budget control
Per port PoE function enable/disable
PoE Admin mode control
PoE Port Power feeding priority
Per PoE port power limit
PD classification detection
Temperature threshold control
PoE Usage threshold control
PD Alive check/reboot
PoE schedule

Rugged Design

Metal case protection
Rack mountable
Supports EFT protection 4K for power line
Supports 4K Ethernet ESD protection
0°C to 50°C operating temperature

Security

IP-Based Access Control List (ACL)
MAC-Based Access Control List
Source MAC / IP address binding
DHCP Snooping to filter untrusted DHCP messages

Layer 2 Features

Prevents packet loss with back pressure (Half-Duplex)
and IEEE 802.3x pause frame flow control (Full-Duplex)
Store and Forward architecture and runt/CRC filtering
Storm control support
Broadcast / Multicast / Unicast
Supports VLAN
IEEE 802.1Q Tagged VLAN
Up to 255 VLANs groups, out of 4094 VLAN IDs
Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad)
Supports Spanning Tree Protocol
STP, IEEE 802.1D Spanning Tree Protocol
RSTP, IEEE 802.1w Rapid Spanning Tree Protocol
MSTP, IEEE 802.1s Multiple Spanning Tree Protocol,
spanning tree by VLAN
BPDU Guard
Supports Link Aggregation
802.3ad Link Aggregation Control Protocol (LACP)
Provides Port Mirror (1-to-1)
Port mirroring to monitor the incoming or outgoing traffic
on a particular port
Loop protection to reduce the possibility of broadcast loops

Quality of Service

Ingress/egress rate limit per port bandwidth control
8 priority queues on all switch ports
Traffic classification
IEEE 802.1p CoS
Typical network application
Strict priority and Weighted Round Robin (WRR) CoS
policies
Supports QoS and In/Out bandwidth control on each port

Multicast

Supports IGMP snooping v1, v2 and v3
Supports MLD snooping v1 and v2
Querier mode support
IGMP snooping port filtering

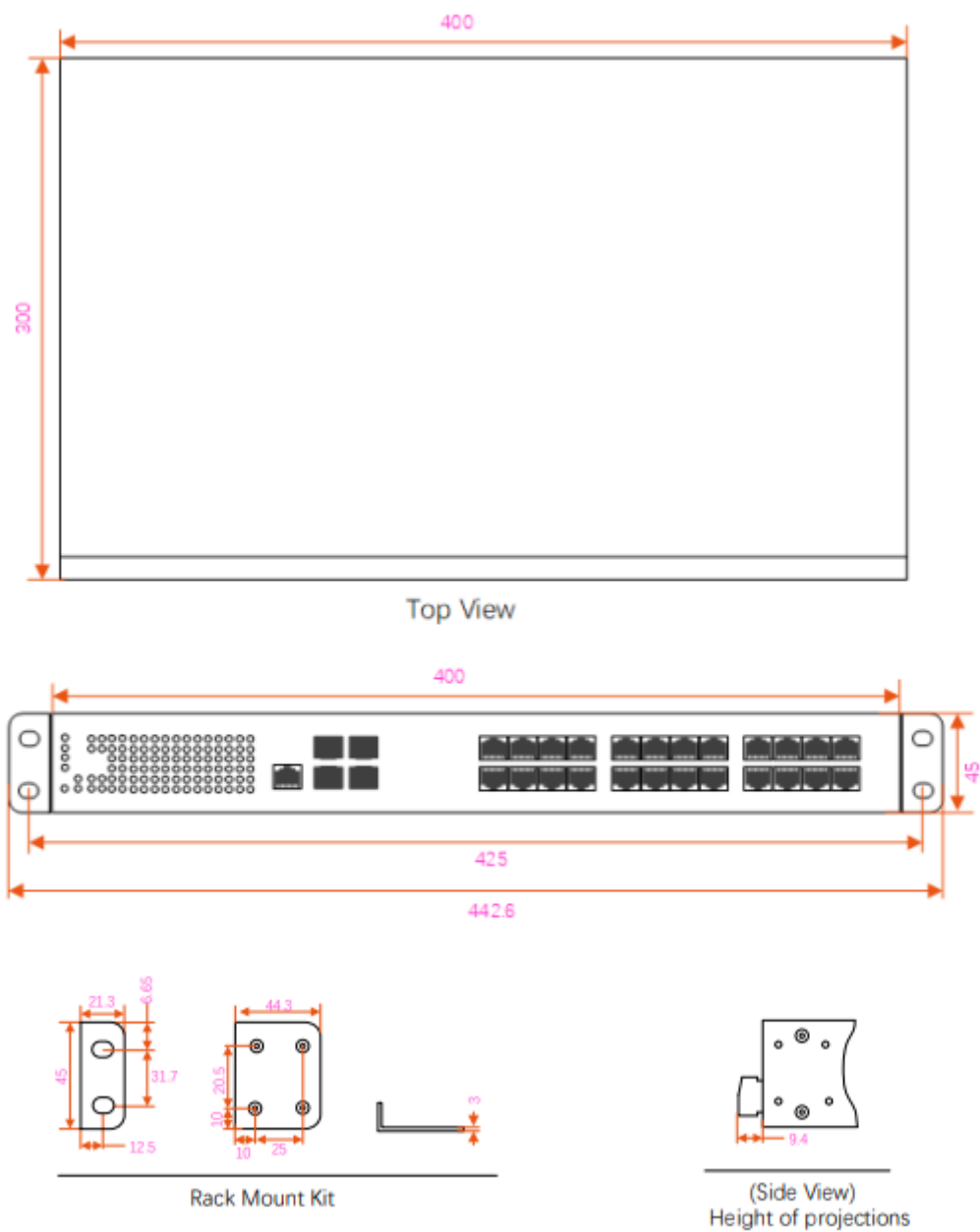
Management

Switch Management Interfaces
Console / Telnet Command Line Interface
Web switch management
SNMP v1 and v2c switch management
Built-in Trivial File Transfer Protocol (TFTP) client
Firmware upload / download via HTTP / TFTP
NTP (Network Time Protocol)
Reset button for system reboot or reset to factory default

Dimension Diagrams

Dimensions

Unit: mm



Part Numbers & Accessories

Series 5 Commercial 1G/10G Switches

Part Code	Description
SIL 534C24MP	24GE + 4 Combo (TP + 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