



## 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 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.

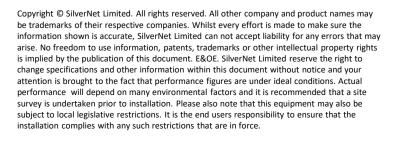
The SilverNet Commercial Gigabit PoE+ Managed Switch is fully compliant with the IEEE802.3af/at standard, providing Power-over-Ethernet over twisted pair cables.

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





Distributed By:



## **Technical Specifications**

Part No.	SIL 534C24MP			
Etherne	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	8К			
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			
Physica	l Characteristics			
Housing	Metal Metal			
IP Rating	IP30			
Dimensions	440mmx300mmx45mm			
Installation	Rack Mount			
Weight	4000g			
Enviror	nmental			
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		
Standard	s		
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 (	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 Feautures**

#### **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 possiblity 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

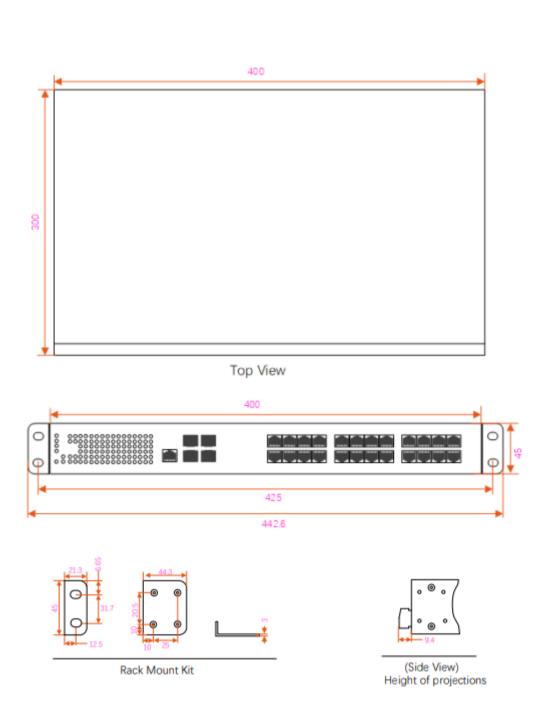
NTP (Network Time Protocol)

Reset button for system reboot or reset to factory default



## **Dimension Diagrams**







## **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

<sup>\*</sup> Series 5 Commercial Switches are mains powered by IEC connector