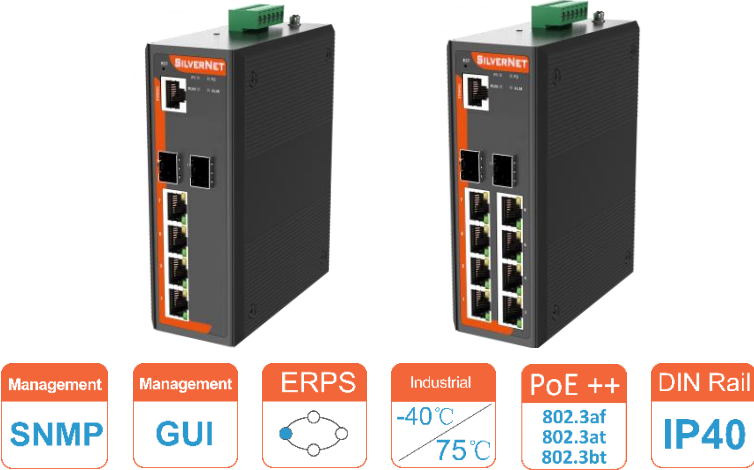# Series 7 Industrial 802.3bt Managed Network Switches

SIL 73204MP-BT
SIL 73208MP-BT

Industrial Gigabit PoE++ Managed Switches

Management SNMP	Management GUI	ERPS	Industrial -40℃ 75℃	PoE ++ 802.3af 802.3at 802.3bt	DIN Rail IP40

OVERVIEW

The SilverNet Industrial Gigabit PoE++ Managed Switches are fully managed layer 2 switches designed for even the harshest industrial environments. They feature an extended temperature range, enabling them to function reliably in unconditioned outdoor cabinets and challenging industrial environments.

Available in two versions, the Switches come with 4 or 8 x 10/100/1000Base-T ports with 2 x 1000Base-FX SFP slots, and boast a dual input design, low power consumption, and high reliability.

Fully compliant with the IEEE802.3af/at standard, the SilverNet Industrial Gigabit PoE++ Managed Switches deliver power over Ethernet through twisted pair cables.

These Switches are a dependable solution for extending Ethernet over distance via fibre daisy chain. This will simplify installation and reduce costs, as it eliminates the need for separate power supplies for IP video cameras and wireless access points.

The intelligent auto-sensing PoE ports ensure that the appropriate power output (i.e., 15.4, 30, 60, or 90W) is consistently and reliably supplied to connected devices.

Additionally, the Switches' fibre optic ports are equipped with a modular SFP slot that supports any MSA-compliant pluggable 1.25Gbps SFP transceiver.

Features

- 4 or 8 x 10/100/1000Base-T
- 2 x 1000Base-FX SFP slots
- 20Gbps bandwidth
- IEEE803.af/at/bt compliant
- RJ45 supports auto MDI/MDI-X function
- Auto negotiation speed, half/full duplex
- Store and forward
- Max packet size: 9K bytes
- MAC address size: 4K

- Wide range power design (9~56VDC)
- Operating temperature (-40°C ~+75°C)
- Resettable fuse to protect against overcurrent
- Reverse Polarity Protection
- DIN Rail or wall mountable
- EFT protection for power line
- Ethernet ESD protection
- IP40 Protection
- Rugged

Distributed By:

SILVERNET
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Technical Specifications

Part No.	SIL 73204MP-BT	SIL 73208MP-BT
Ports		
Total number of ports	6 ports	10 ports
Gigabit Ethernet	4 ports	8 ports
Gigabit Fibre	2 SFP	
Number of PoE ports	4 ports	8 ports
Max output per port	Up to 90W	Up to 90W with MAX total PWR: 480W (48VDC)
Performance		
Switch bandwidth	20Gbps	
MAC address size	4K	
Processing type	Store and Forward	
Time delay	<7µs	
Jumbo Frames	9K bytes	
Packet buffer space	2Mbit	
Power		
Power input	9~56VDC, Redundant	
Power consumption	<10W (Excluding PoE)	
Standards		
Standards	G.8032 (ERPS) IEEE.802.3, IEEE802.3u, IEEE802.3z, IEEE802.3x, IEEE802.3ad, IEEE802.1p, IEEE802.1x, IEEE802.3ab, IEEE802.1Q, IGMP snooping, IEEE 802.1D-2004, IEEE 802.1w, IEEE802.1s	
Safety	IEC/EN 62368-1	
EMC	UKCA BS EN 55032:2015/A11:2020 UKCA BS EN IEC 61000-3-2:2019+A1:2021 UKCA BS EN 61000-3-3:2013/A2:2021 UKCA BS EN 55035:2017/A11:2020	
EMI	EN55032 Class A, CISPR 32 FCC Part 15B Class A	
EMS	IEC 61000-4-2 (ESD): Level 4 (8K/15K) IEC 61000-4-3 (RS): Level 3 (10V/m) IEC 61000-4-4 (EFT): Level 3 (1V/2V) IEC 61000-4-5 (surge): Level 3 (4KV/2KV) IEC 61000-4-6 (RF coupling): (10V/m) IEC61000-4-8 (Power Frequency Magnetic Field):Level 4 (30A/m)	
LVD	UKCA BS EN IEC 62368-1:2020+A11:2020	
ROHS	UKCA BS IEC 62321-1:2013, IEC 62321-3-1:2013 UKCA BS IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 UKCA BS IEC 62321-6:2015, IEC 62321-7-1:2015 UKCA BS IEC 62321-7-2:2017, IEC 62321-8:2017	
Shock	IEC 60068-2-27	
Freefall	IEC 60068-2-32	
Vibration	IEC 60068-2-6	
Physical		
Dimensions and weight	Dimensions Approx: 138 x 108 x 49mm Weight: 0.6kg	Dimensions Approx: 138 x 108 x 49mm Weight: 0.68kg
Enclosure	IP40 Protection, Aluminium Alloy	
Mounting	DIN Rail, Wall mountable	
Environment		
Operating Temperature	-40~+75℃ (Storage -40~+85℃)	
Humidity	5-90% (non-condensing)	

STANDARD FEATURES

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

SIL 73204MP-BT
- 4-port 10/100/1000Base-T with PoE++ and 2-ports SFP (fibre) 100/1000Base-X

SIL 73208MP-BT
- 8-port 10/100/1000Base-T with PoE++ and 2-ports SFP (fibre) 100/1000Base-X

Power over Ethernet
- Complies with IEEE 802.3af / IEEE 802.3at / IEEE 802.bt Power over Ethernet
- IEEE 802.3af / 802.3at / 802.3bt devices powered
- Supports PoE power up to 90 Watts for each bt port*
- *MAX total PWR: 480W (48VDC)
- 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
- IP40 Aluminium metal case protection
- DIN-rail and wall mount design
- 48V DC, redundant power with polarity reverse protect function
- Supports EFT protection 4K for power line
- Supports 4K Ethernet ESD protection
- -40°C~+75°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 shaper and 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
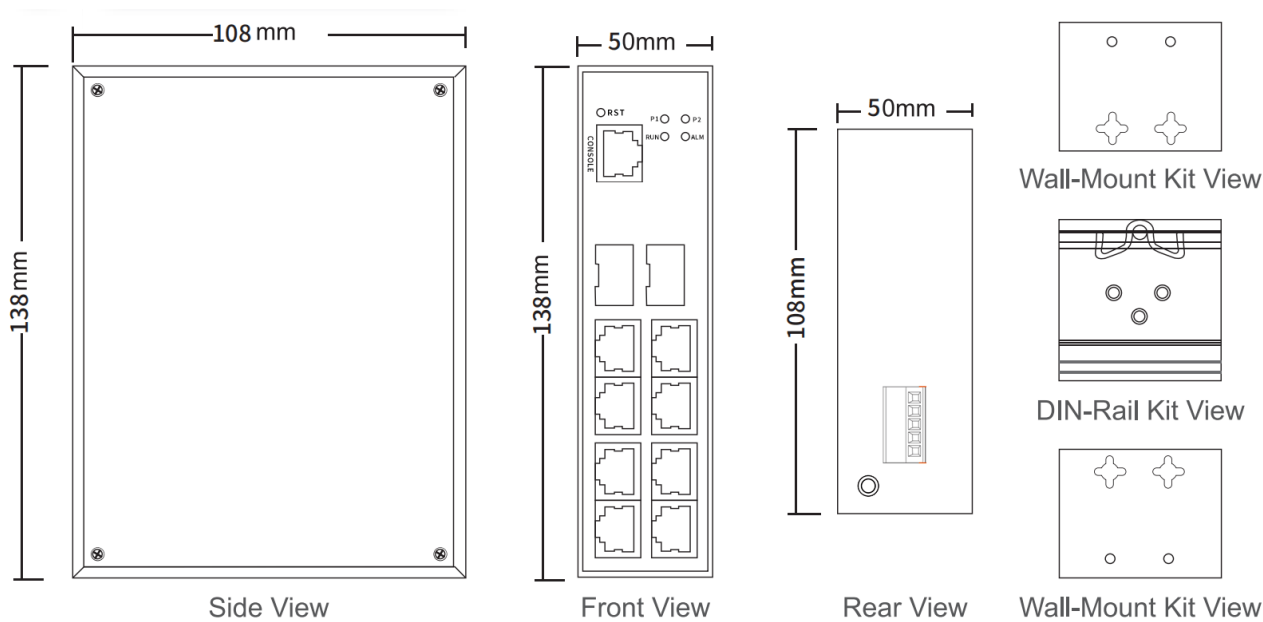- Supports QoS and In/Out bandwidth control on each port

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)
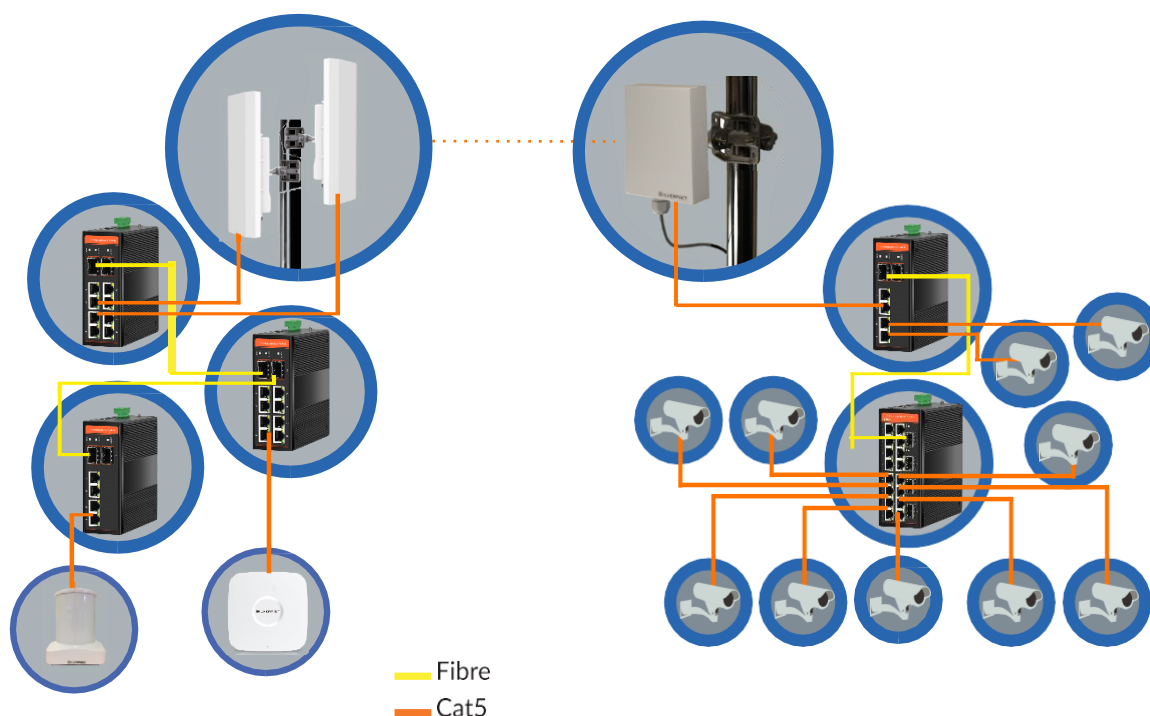- Reset button for system reboot or reset to factory default
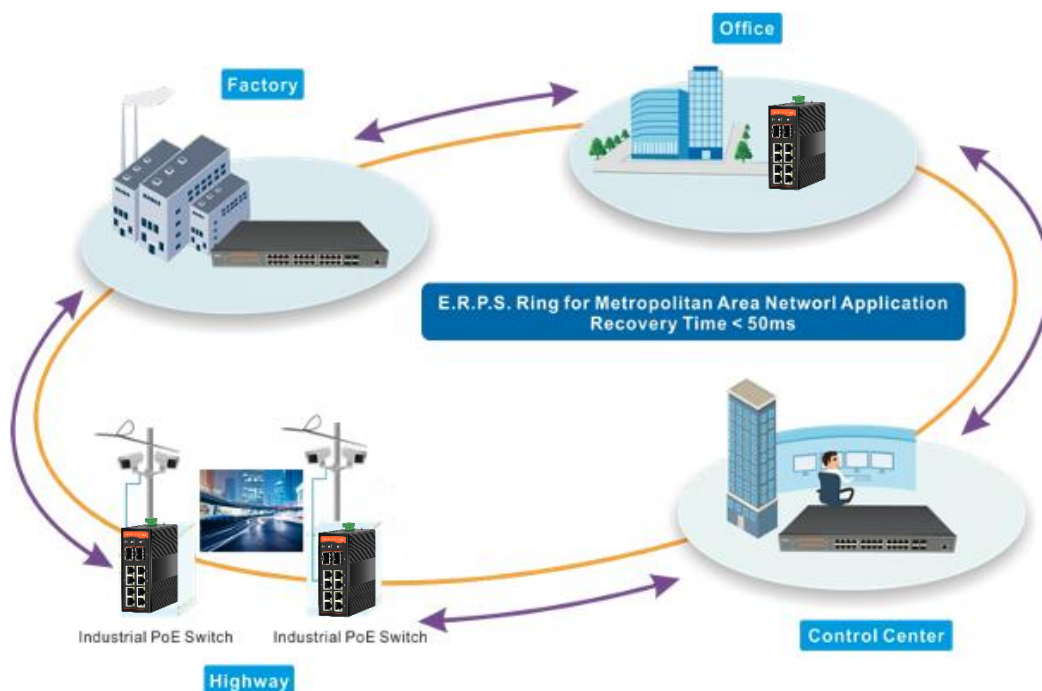
Dimension Diagrams

SIL 73204MP-BT & SIL 73208MP-BT

Side View

Front View

Rear View

Wall-Mount Kit View

DIN-Rail Kit View

Wall-Mount Kit View

Typical Applications

Connection Applications

Fibre
Cat5

Redundant Ring

Fast Recovery for Critical Network Applications

E.R.P.S. Ring for Metropolitan Area Networl Application
Recovery Time < 50ms

Office

Factory

Industrial PoE Switch   Industrial PoE Switch

Highway

Control Center

Part Numbers & Accessories

Series 7 Industrial Managed Fibre Switches

Part Code	Description
SIL 73204MP-BT	10/100/1000M 2Gx4GE POE++, two SFP slot, Excluding Power Supply
SIL 73208MP-BT	10/100/1000M 2Gx8GE POE++, two SFP slot, Excluding Power Supply
SIL 73416MP	10/100/1000M 4Gx16GE POE+, four SFP slot, Excluding Power Supply
SIL 73024MP	10/100/1000M 24GE, 16 ports POE+, Excluding Power Supply

Power Supplies

Part Code	Description
SIL NDR-120-48	120W 48V 2.5A Industrial Din Rail Power Supply
SIL NDR-240-48	240W 48V 5A Industrial Din Rail Power Supply
SIL NDR-480-48	480W 48V 10A Industrial Din Rail Power Supply

1Gbps Fibre Transmission

Part Code	Description
SIL-SFP0-01-25-X850-0-5D	1G Multimode 850nm SFP, 550m
SIL-SFP0-01-25-X131-10XD	1G Singlemode 1310nm SFP, 10km
SIL-SFP0-01-25-X131-40XD	1G Singlemode 1310nm SFP, 40km
SIL-SFP0-01-25-X155-80XD	1G Singlemode 1550nm SFP, 80km
1Gbps BiDi	
SIL-SFP0-01-25-B131-10XD	1G SM 1310nm TX FP 10km with DDM, 1550nm RX
SIL-SFP0-01-25-B155-10XD	1G SM 1550nm TX FP 10km with DDM, 1310nm RX
SIL-SFP0-01-25-B139-10XD	1G SM 1310nm TX FP 10km with DDM, 1490nm RX
SIL-SFP0-01-25-B149-10XD	1G SM 1490nm TX FP 10km with DDM, 1310nm RX
SIL-SFP0-01-25-B131-40XD	1G SM 1310nm TX DFB 40km with DDM, 1550nm RX
SIL-SFP0-01-25-B155-40XD	1G SM 1550nm TX DFB 40km with DDM, 1310nm RX
SFP to Ethernet	
SIL-SFP0-01-25-XXXT-0-1	1G RJ45 Copper SFP, 100m