

SICOM3024SM

24+4G Port POE Modular Managed Industrial Ethernet Switch

CE, FCC, ROHS
Chinese State Grid Certification**Overview**

SICOM3024SM is a Gigabit modular managed industrial Ethernet switch which supports up to 24 high-power POE feeding ports. It supports DT-Ring and DT-Ring+ with recovery time less than 50ms. Its powerful network management system supports CLI, Telnet, WEB, SNMP, OPC and network topology auto-generation. The reliable short lagging function, the function of no packet loss in long-time full load running and in Goose message real-time transmission make SICOM3024SM quite suitable for digital substations and other fields.

Features

1. Modular design, supports 4 Gigabit SFP slots and 24 100Base TP/fiber ports with POE function (optional)
2. Supports high-power POE feeding output of DC48V and DC24V compliant with IEEE802.3af. The max output power consumption of each port is 29W
3. Supports DT-Ring protocols (recovery time<50ms), RSTP/STP (IEEE802.1w/d)
4. Flexible network topologies: ring, chain, star and tangent ring
5. Advanced ring topology protocol avoiding broadcast storm
6. Supports IGMP Snooping, port trunking, port mirroring, QoS, VLAN, ACL and link aggregation
7. Supports port speed limitation and special broadcast storm control
8. Safe MAC and port binding function, static FDB supported
9. Bandwidth configuration controls port bandwidth properly
10. Improves network monitoring ability through RMON (group 1, 2, 3 and 9)
11. Supports multiple management methods including CLI, TELNET, WEB, SNMP V1/V2/V3 and OPC
12. EMC industrial level 4, specially designed for harsh electromagnetic interference environment
13. Various power supply options, dual redundant DC power inputs
14. Operating temperature: -40 to 85°C (-40 to 185°F)
15. Ribbed aluminum case for heat dissipation (patent), fanless design
16. 19 inch 2U Rack-mounting
17. IP40 protection class
18. Unified management software for SICOM series: Kyvision3.0

Technical Specifications**Standard**

IEEE802.3
IEEE 802.3u
IEEE 802.3x
IEEE802.3z
IEEE802.3ab
IEEE802.1d
IEEE802.1w
IEEE802.1p
IEEE802.1q
IEEE802.3af
Store and forward switching mode

Network

Ring, chain, star and tangent ring network topology

Interface

Gigabit Ethernet Ports: 4 Gigabit SFP slots for 1000Base-SX/LX/LH/ZX, LC or 10/100/1000Base-T(X), RJ45 interface module
Fast Ethernet Ports: 4 100M pluggable modules and each module supports 6 100Base copper/fiber ports. The copper ports support POE function (optional)
CONSOLE Interface: RS232, RJ45
LED Indicator: RUN; LINK, DPX (G1-G4); LINK/ACT, 10M/100M (1/1-6, 2/1-6, 3/1-6, 4/1-6)

Power over Ethernet:

Power feeding ports: Max 24 10/100Base-T(X) adaptive Ethernet ports
POE mode: 1, 2, 3, 6; 4, 5, 7, 8 optional
Max output power per each port: 29W
Max output power in the end of 100m cable of each port: 15.6W
Output voltage: 24VDC, 48VDC (optional)
POE output terminal: 5-Pin 9.5mm-spacing plug-in terminal block

Performance

Backplane switching capacity: 12.8G
MAC Address Table Size: 8K

Cable

Twisted Pair: 0-100m (Standard CAT5, CAT5e network cable)
Multi Mode Fiber: 1310nm, 0-5km (100Mbps); 1310nm 0-2km (1000Mbps)
Single Mode Fiber: 1310nm, 0-40km; 1550nm, 0-80km

Power Requirements

Power input: 24VDC (18-36VDC), 48VDC (36-72VDC), 110VDC (82-185VDC), 110VAC/220VAC/220VDC (85-264VAC/120-370VDC), dual redundant DC power inputs
Power terminal: 3-Pin 9.5mm-spacing terminal block, 3-Pin AC power socket
Power consumption: <25W

Physical Characteristics

Casing: Ribbed aluminum case (fanless)
Protection class: IP40
Installation: 19 inch 2U rack-mounting
Dimensions (WxHxD): 482.6x88x245mm (19x3.46x9.65 in.)
Weight: 5kg (11.023 pound)

Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 0 to 95% (non-condensing)

Approvals

IEC61000-4-2 (ESD): ±8KV contact discharge, ±15KV air discharge
IEC61000-4-3 (RS): 10V/M (80-1000MHz)
IEC61000-4-4 (EFT): power line ±4KV, data line ±2KV
IEC61000-4-5 (Surge): power line ±4KV CM/±2KV DM, data line ±2KV
IEC61000-4-6 (CS): 3V (10KHZ-150KHZ), 10V (150KHZ-80MHz)
IEC61000-4-8 (Power frequency magnetic field): 100A/m cont. 1000A/m, 1s to 3s
IEC61000-4-12/18 (Damped oscillatory wave): 2.5KV CM, 1KV DM
IEC61000-4-10 (Damped oscillatory): 30A/m
IEC61000-4-16 (Common mode conduct): 30V cont. 300V, 1s
FCC CFR47 Part 15/EN55022: Class A&B
IEC61000-6-2 (Industrial Standards), IEC61850-3 (Substations), IEEE1613 (Electric Power Substations), EN50121-4(Railway Applications)

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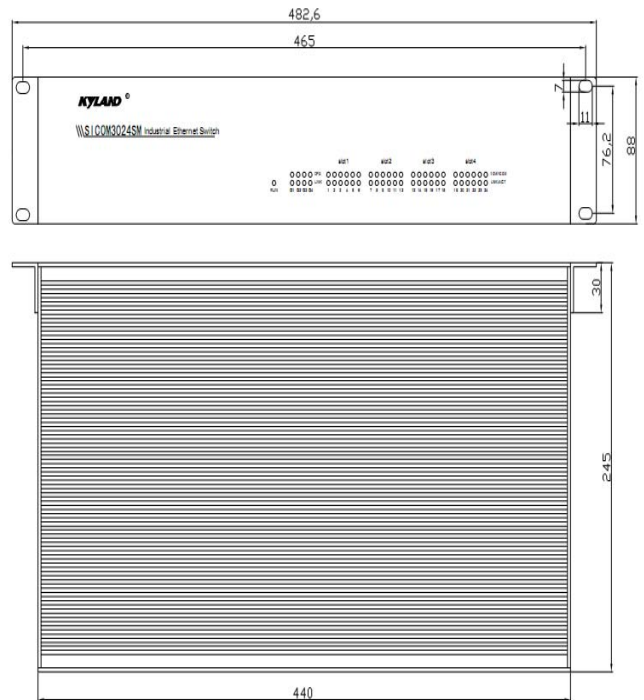
MTBF

35 years

Warranty

5 years

Mechanical Drawing



Ordering Information

Model	Description
SICOM3024SM-4GX Chassis	Chassis of SICOM3024SM offering 4 Gigabit SFP slots and 4 expansion slots. Each slot supports 6 100Base copper/fiber ports, supports independent feeding input, with the power supply of 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC
SICOM3024SM Chassis	Chassis of SICOM3024SM offering 4 expansion slots. Each slot supports 6 100Base copper/fiber ports, supports independent feeding input, with the power supply of 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC
SM3.2-6S	Interface module with 6 x 100Base-FX ports, single mode, FC/SC/ST connector
SM3.2-6M	Interface module with 6 x 100Base-FX ports, multi mode, FC/SC/ST connector
SM3.2-5S-T	Interface module with 5 x 100Base-FX ports, single mode, FC/SC/ST connector and 1 x 10/100Base-T(X) port, RJ45 connector
SM3.2-5M-T	Interface module with 5 x 100Base-FX ports, multi mode, FC/SC/ST connector and 1 x 10/100Base-T(X) port, RJ45 connector
SM3.2-4S-2T	Interface module with 4 x 100Base-FX ports, single mode, FC/SC/ST connector and 2 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-4M-2T	Interface module with 4 x 100Base-FX ports, multi mode, FC/SC/ST connector and 2 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-3S-3T	Interface module with 3 x 100Base-FX ports, single mode, FC/SC/ST connector and 3 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-3M-3T	Interface module with 3 x 100Base-FX ports, multi mode, FC/SC/ST connector and 3 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-2S-4T	Interface module with 2 x 100Base-FX ports, single mode, FC/SC/ST connector and 4 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-2M-4T	Interface module with 2 x 100Base-FX ports, multi mode, FC/SC/ST connector and 4 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-S-5T	Interface module with 1 x 100Base-FX port, single mode, FC/SC/ST connector and 5 x 10/100Base-T(X) ports, RJ45 connector

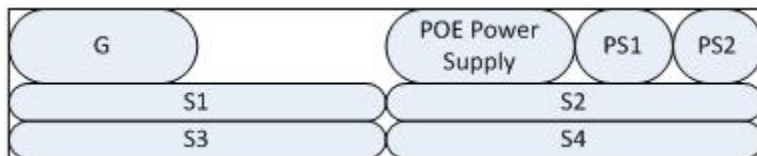
Model	Description
SM3.2-M-5T	Interface module with 1 x 100Base-FX port, multi mode, FC/SC/ST connector and 5 x 10/100Base-T(X) ports, RJ45 connector
SM3.2-6T	Interface module with 6 x 10/100Base-T(X) port, RJ45 connector
SM3.2-6T-6P-24	Interface module with 6 x 10/100Base-T(X) POE port, RJ45 connector (24VDC power supply)
SM3.2-6T-6P-48	Interface module with 6 x 10/100Base-T(X) POE ports, RJ45 connector (48VDC power supply)

Power supply: 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, dual redundant DC power inputs (optional)

SFP Modules

- SM-GSFP-TX/RJ45: SFP module with 1 x 10/100/1000M port, RJ45, 100m
- SM-GSFP-SX/LC-550: SFP module with 1 x 1000M multimode port, LC, 850nm, 550m
- SM-GSFP-LX/LC-550: SFP module with 1 x 1000M multimode port, LC, 1310nm, 550m
- SM-GSFP-LX/LC-10: SFP module with 1 x 1000M single mode port, LC, 1310nm, 10km
- SM-GSFP-LX/LC-15: SFP module with 1 x 1000M single mode port, LC, 1310nm, 15km
- SM-GSFP-LH/LC-40: SFP module with 1 x 1000M single mode port, LC, 1310nm, 40km
- SM-GSFP-ZX/LC-40: SFP module with 1 x 1000M single mode port, LC, 1550nm, 40km
- SM-GSFP-ZX/LC-60: SFP module with 1 x 1000M single mode port, LC, 1550nm, 60km
- SM-GSFP-ZX/LC-80: SFP module with 1 x 1000M single mode port, LC, 1550nm, 80km

Order Codes



SICOM3024SM Rear View

SICOM3024SM - - - - - - - -

G S1 S2 S3 S4 PS1 PS2

G: Gigabit Slot

4GX: 4 Gigabit SFP ports slot, please select SICOM3024SM-4GX Chassis.
None: No Gigabit port, please select SICOM3024 Chassis.

S1 to S4: 100M slots

- 6T=SM3.2-6T, interface module with 6 10/100Base-TX RJ45 ports
- 6T24=SM3.2-6T-6P-24, interface module with 6 10/100Base-TX RJ45 POE ports, 24VDC POE output
- 6T48=SM3.2-6T-6P-48, interface module with 6 10/100Base-TX RJ45 POE ports, 48VDC POE output
- 3MSC3T=SM3.2-3M-3T, 3 multi mode fiber ports, 1310nm, 5km, SC connector, 3 10/100Base-TX RJ45 ports
- 3MST3T= SM3.2-3M-3T, 3 multi mode fiber ports, 1310nm, 5km, ST connector, 3 10/100Base-TX RJ45 ports
- 3MFC3T= SM3.2-3M-3T, 3 multi mode fiber ports, 1310nm, 5km, FC connector, 3 10/100Base-TX RJ45 ports
- 3SSC3T= SM3.2-3S-3T, 3 single mode fiber ports, 1310nm, 40km, SC connector, 3 10/100Base-TX RJ45 ports
- 3SST3T= SM3.2-3S-3T, 3 single mode fiber ports, 1310nm, 40km, ST connector, 3 10/100Base-TX RJ45 ports
- 3SFC3T= SM3.2-3S-3T, 3 single mode fiber ports, 1310nm, 40km, FC connector, 3 10/100Base-TX RJ45 ports
- 6MSC=SM3.2-6M, 6 multi mode fiber ports, 1310nm, 5km, SC connector
- 6MST= SM3.2-6M, 6 multi mode fiber ports, 1310nm, 5km, ST connector
- 6MSC= SM3.2-6M, 6 multi mode fiber ports, 1310nm, 5km, FC connector
- 6SSC= SM3.2-6M, 6 single mode fiber ports, 1310nm, 40km, SC connector
- 6SST= SM3.2-6M, 6 single mode fiber ports, 1310nm, 40km, ST connector
- 6SFC= SM3.2-6M, 6 single mode fiber ports, 1310nm, 40km, FC connector
- XX=Empty

(Note: Please contact sales if you need 60km, 80km single mode fiber ports or single bi-direction fiber ports. Interface module also supports other fiber and copper combinations, but will need longer lead time, not recommended.)

PS1 and PS2: Power Supply 1 and 2

24= 24VDC (18-36VDC)

48= 48VDC (36-72VDC)

110=110VDC (82-185VDC)

220A= 110VAC/220VAC/220VDC (85-264VAC/120-370VDC)

XX=No power supply (PS2 only)

Example Order Codes

SICOM3024SM-4GX-6T48-6T48-6T48-220A-220A

SICOM3024-4GX Chassis, 4x SM3.2-6T-6P-48, 85-264VAC/120-370VDC dual power supplies