

SICOM3048

48+4G Port Modular Managed Industrial Ethernet Switch

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

SICOM3048 is a modular network-managed industrial Ethernet switch specially designed by KYLAND for industrial applications. Its high-performance switch engine, solid and closed case, high-efficiency single-rib-shape case for heat dissipation without using fans, over-current, over-voltage and EMC protection at power input side, and excellent EMC protection of RJ45 port allow SICOM3048 to work in harsh and dangerous industrial environments. The redundant function of optical fiber network, independent entire network management channel, redundant power input function, and powerful entire network real-time management system provides multiplex guarantee for reliable operation of the system.

Features

1. Modular design, supports 4 Gigabit SFP slots, 24 100Base TP/fiber ports and 24 10/100Base-T(X) RJ45 ports
2. Supports DT-Ring protocols (recovery time<50ms) and RSTP/STP (IEEE802.1w/d)
3. Flexible network topologies: ring, chain, star and tangent ring
4. Advanced ring topology protocol avoiding broadcast storm
5. Supports IGMP Snooping, port trunking, port mirroring, QoS, VLAN, ACL and link aggregation
6. Supports port speed limitation and special broadcast storm control
7. Safe MAC and port binding function, static FDB supported
8. Bandwidth configuration controls port bandwidth properly
9. Improves network monitoring ability through RMON (group 1, 2, 3 and 9)
10. Supports multiple management methods including CLI, TELNET, WEB, SNMP V1/V2 and OPC
11. EMC industrial level 4, specially designed for harsh electromagnetic interference environment
12. Various power supply options, dual redundant DC power inputs
13. Operating temperature: -40 to 85°C (-40 to 185°F)
14. Ribbed aluminum case for heat dissipation (patent), fanless design
15. 19 inch 2U Rack-mounting
16. IP40 protection class
17. 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
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 modules

Fast Ethernet Ports: 24 x 10/100Base-T(X) ports, RJ45; 4 x 100Base SFP slots, each slot supports a 100M pluggable interface module with 6 100Base TP/fiber ports

CONSOLE Interface: RS232, RJ45

LED Indicators: RUN; LINK, DPX (G1-G4); LINK/ACT, 10M/100M (1-24, 1/1-6, 2/1-6, 3/1-6, 4/1-6)

Performance

Backplane switching capacity: 17.6G
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 (optional)

Power terminal: 3-Pin 9.5mm-spacing terminal block, 3-Pin 3.81mm-spacing plug-in terminal block; 3-pin AC power socket

Power consumption: <40W

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

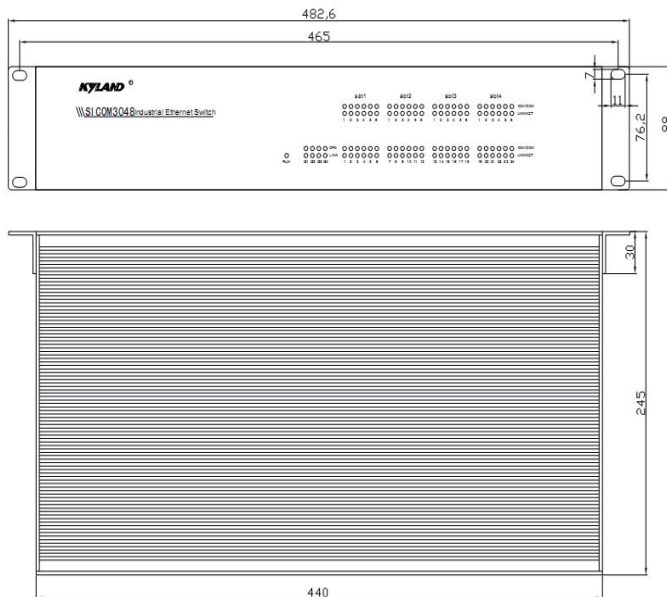
IEC61000-4-5 (Surge): power line $\pm 4KV$ CM/ $\pm 2KV$ DM, data line $\pm 2KV$
 IEC61000-4-6 (CS): 3V (10KHZ-150KHZ), 10V (150KHz-80MHz)
 IEC61000-4-8 (Power frequency magnetic field): 100A/m cont. 1000A/m, 1s to 3s
 IEC61000-4-12/18 (Damped oscillatory wave): 2.5KV CM, 1KV DM
 IEC61000-4-10 (Damped 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)

CE, FCC, ROHS, Chinese State Grid Certification

MTBF
35 years

Warranty
5 years

Mechanical Drawing



Ordering Information

Model	Description
SICOM3048-4GX Chassis	Chassis of SICOM3048-4GX offering 4 Gigabit SFP slots, 24 10/100Base-T(X) ports and 4 expansion slots for 100Base module with single power supply of 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC
SICOM3048 Chassis	Chassis of SICOM3048 offering 24 10/100Base-T(X) ports and 4 expansion slots for 100Base module with single 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

Model	Description
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
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) ports, RJ45 connector

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

SFP Modules

- SM-GSFP-TX/RJ45: SFP module with 1x10/100/1000M 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 1x1000M multimode port, LC, 1310nm, 550m
- SM-GSFP-LX/LC-10: SFP module with 1x1000M 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 1x1000M 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 1x1000M single mode port, LC, 1550nm, 60km
- SM-GSFP-ZX/LC-80: SFP module with 1x1000M single mode port, LC, 1550nm, 80km

Order Codes



SICOM3048 Rear View

SICOM3048 - - - - - - - -

G S1 S2 S3 S4 PS1 PS2

G: Gigabit Slot

4GX: 4 Gigabit SFP ports slot, please select SICOM3048-4GX Chassis.
None: No Gigabit port, please select SICOM3048 Chassis.

S1 to S4: 100M slots

- 6T=SM3.2-6T, interface module with 6 10/100Base-TX RJ45 ports
- 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

SICOM3048-4GX-6T-6T-6MSC-3MSC3T-220A-XX

SICOM3048-4GX Chassis, 2x SM3.2-6T, 1 SM3.2-6M with SC connector, 1 SM3.2-3M-3T with SC connector, single power supply 85-264VAC/120-370VDC

Please visit our website: www.kyland.cn for the latest updates.