KYLAND

Industrializing the Ethernet
Simplifying Industrial Communication

SICOM3048
48+4G Port Modular Managed Industrial Ethernet Switch

Version: 101210

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℃ (-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℃ (-40 to 185°F)
Storage Temperature: -40 to 85℃ (-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)
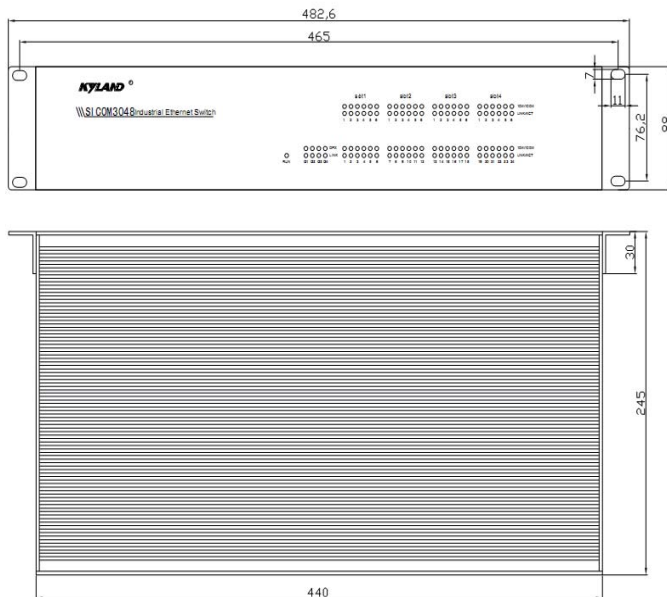IEC61000-4-4 (EFT): power line ±4KV, data line ±2KV

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)

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

KYLAND
Industrializing the Ethernet
Simplifying Industrial Communication

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 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

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