Version: 100525

### SICOM3024

24+2G Port Managed Industrial Ethernet Switch



# CE, FCC, RoHS Chinese State Grid Certificaiton

### **Overview**

SICOM3024 is a high-performance 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, overcurrent, overvoltage and EMC protection at power input side, and excellent EMC protection of RJ45 port make SICOM3024 applicable in harsh and dangerous industrial environments. The redundant function of optical fiber network, independent entire network management channel, dual redundant power supplies function, and powerful entire network realtime management system provide multiplex guarantee for reliable operation of the system.

### Features

1. Supports 2 Gigabit SFP slots, 8 100Base TP/fiber ports and 16 10/100Base-T(X) RJ45 ports

2. Supports DT-Ring protocols (recovery time<50ms), 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

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 properly9. Improves network monitoring ability through RMON (group 1, 2, 3 and 9)

10. Supports multiple management methods including CLI, TELNET, WEB, SNMP V1/V2/V3, OPC

11. EMC industrial level 4, specially designed for harsh electromagnetic interference environment

12. Abundant power supply options, dual redundant power supplies

13. Relay alarm output for the loss of power

14. Operating temperature: -40 to 85°C (-40 to 185°F)

15. Ribbed aluminum case for heat dissipation, fanless design

16. Rack-mounting (19 inch 1U)

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 Store and forward switching mode

#### Network

Ring, chain, star and tangent ring network topology

#### Interface

Gigabit Ethernet Ports: 2 Gigabit SFP slots for 1000Base-SX/LX/LH/ZX, LC or 10/100/1000Base-T(X), RJ45 interface module Fast Ethernet Ports:  $16 \times 10/100Base$ -T(X) ports, RJ45;  $8 \times 100Base$  TP/fiber ports

CONSOLE Interface: RS232, RJ45

Alarm Contact: 3-Pin 3.81mm-spacing terminal block, 250VAC/220VDC Max; 2A Max; 60W Max LED Indicator: RUN, PWR1, PWR2; LINK, DPX (G1-G2); LINK/ACT, 10M/100M (1-24)

#### Performance

Backplane switching capacity: 8.8G 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: 12VDC (9-18VDC), 24VDC (18-36VDC), 48VDC (36-72VDC), 110VDC (82-185VDC), 110VAC/220VAC/220VDC (85-264VAC/120-370VDC), dual redundant power supplies (optional) Power terminal: 5-Pin 5.08mm-spacing plug-in terminal block Power consumption: <20W

#### **Physical Characteristics**

Casing: Ribbed aluminum case (fanless) Protection class: IP40 Installation: 19 inch 1U rack mounting Dimensions (WxHxD): 482.6x44x245mm (19x1.73x9.65 in.) Weight: 3kg (6.614 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)

# KYLAND

#### Industrializing the Ethernet Simplifying Industrial Communication

**Mechanical Drawing** 

#### 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  $\pm$ 4KV, data line  $\pm$ 2KV

IEC61000-4-5 (Surge): power line  $\pm 4 \text{KV}$  CM/ $\pm 2 \text{KV}$  DM, data line  $\pm 2 \text{KV}$ 

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

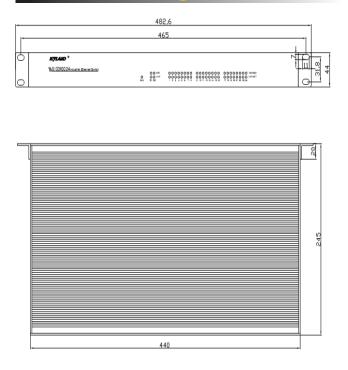
#### MTBF

35 years

#### Warranty

5 years

# **Ordering Information**



Model	Description
SICOM3024-2GX-8S-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 8 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-8M-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 8 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-6S-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 6 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-6M-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 6 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-4S-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 4 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-4M-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 4 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-2S-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 2 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-2M-16T	Managed Ethernet switch with 2 Gigabit SFP slots, 2 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-6S-18T	Managed Ethernet switch with 2 Gigabit SFP slots, 6 100Base-FX ports, single mode, FC/SC/ST connector, 18 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature

# KYLAND

## Industrializing the Ethernet Simplifying Industrial Communication

Model	Description
SICOM3024-2GX-6M-18T	Managed Ethernet switch with 2 Gigabit SFP slots, 6 100Base-FX ports, multi mode, FC/SC/ST connector, 18 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-4S-20T	Managed Ethernet switch with 2 Gigabit SFP slots, 4 100Base-FX ports, single mode, FC/SC/ST connector, 20 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-4M-20T	Managed Ethernet switch with 2 Gigabit SFP slots, 4 100Base-FX ports, multi mode, FC/SC/ST connector, 20 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-2S-22T	Managed Ethernet switch with 2 Gigabit SFP slots, 2 100Base-FX ports, single mode, FC/SC/ST connector, 22 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-2M-22T	Managed Ethernet switch with 2 Gigabit SFP slots, 2 100Base-FX ports, multi mode, FC/SC/ST connector, 22 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2GX-24T	Managed Ethernet switch with 2 Gigabit SFP slots, 24 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-4GX-24T	Managed Ethernet switch with 4 Gigabit SFP slots, 24 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperatur
SICOM3024-85-16T	Managed Ethernet switch with 8 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-8M-16T	Managed Ethernet switch with 8 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-6S-16T	Managed Ethernet switch with 6 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-6M-16T	Managed Ethernet switch with 6 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-4S-16T	Managed Ethernet switch with 4 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-4M-16T	Managed Ethernet switch with 4 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-25-16T	Managed Ethernet switch with 2 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2M-16T	Managed Ethernet switch with 2 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-6S-18T	Managed Ethernet switch with 6 100Base-FX ports, single mode, FC/SC/ST connector, 18 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature

# KYLAND

Industrializing the Ethernet Simplifying Industrial Communication

Model	Description
SICOM3024-6M-18T	Managed Ethernet switch with 6 100Base-FX ports, multi mode, FC/SC/ST connector, 18 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-4S-20T	Managed Ethernet switch with 4 100Base-FX ports, single mode, FC/SC/ST connector, 20 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-4M-20T	Managed Ethernet switch with 4 100Base-FX ports, multi mode, FC/SC/ST connector, 20 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2S-22T	Managed Ethernet switch with 2 100Base-FX ports, single mode, FC/SC/ST connector, 22 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-2M-22T	Managed Ethernet switch with 2 100Base-FX ports, multi mode, FC/SC/ST connector, 22 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
SICOM3024-24T	Managed Ethernet switch with 24 10/100Base-T(X) ports, RJ45 connector, rack mounting, 12VDC, 24VDC, 48VDC 110VDC, 110VAC/220VAC/220VDC, single power supply, -40 to 85°C operating temperature
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 multi mode port, LC, 850nm, 550m
SM-GSFP-LX/LC-550	SFP module with 1 x 1000M multi mode 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

Power Supply: 12VDC, 24VDC, 48VDC, 110VDC, 110VAC/220VAC/220VDC, dual redundant power supplies (optional)

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

www.kyland.cn