

SICOM3024

Layer 2 24+4G Port Managed Rack Mountable IEC61850 Switch



- Supports 4 Gigabit SFP slots, 16 10/100Base-TX ports and 8 Fast Ethernet fiber/RJ45 optional ports
- Supports DT-Ring protocols and MSTP
- Supports power failure alarm
- Exceeds IEC61850-3 and IEEE1613
- CE, FCC certification



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 real-time management system provide multiplex guarantee for reliable operation of the system.

Features & Benefits

- Redundancy Technology: supports DT-Ring protocols (recovery time < 50ms) and MSTP
- Multicast Protocol: supports IGMP Snooping, GMRP and static multicast
- Network Partition: supports VLAN, PVLAN
- Service Quality: supports QoS
- Bandwidth Management: supports port trunking, port speed limit, broadcast storm control
- Network Management and Monitoring: supports CLI, Telnet, WEB management methods, Kyvision centralized management, SNMPv1/v2/v3, RMON, LLDP, STP, DHCP
- Network Security: supports DT-Psec, SSH, SSL, ACL
- Device Management: supports FTP upgrade
- Device Maintenance: supports port mirroring
- Alarm Output: supports IP/MAC conflicts, power, port and ring alarms
- Special Function: supports Link Check and Loop Status Check

Technical Specifications

Standard

IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE802.1p, IEEE 802.1Q, IEEE 802.1s

Protocols

DT-Ring, DT-Ring+, DT-VLAN, MSTP;
IGMP Snooping, GMRP;
VLAN, PVLAN;
Telnet, HTTP, HTTPS, SNMPv1/v2/v3, RMON, LLDP, STP, DHCP server;
DT-Psec, SSH, SSL, ACL;
FTP;
ARP, QoS

Switch Properties

Priority Queues: 4
Number of VLANs: 256
VLAN ID: 1-4094
Number of Multicast Groups: 256
MAC Table: 8K
Packet Buffer: 2Mbit
Packet Forwarding Rate: 9.5Mpps
Switching Delay: < 5μs

Interface

Gigabit Ethernet Ports: 4 or 2 1000Base SFP slots
Fast Ethernet Fiber Ports: max 8 100Base-FX, SM/MM ports, FC/SC/ST connector
Fast Ethernet RJ45 Ports: max 24 10/100Base-TX RJ45 ports
Console Port: RS232 (RJ45 connector)
Alarm Contact: 3-pin 3.81mm-spacing plug-in terminal block, 250VAC/220VDC Max, 2A Max, 60W Max

LED

LEDs on Front Panel:
-Running LED: Run
-Interface LED: Link/ACT (Fast Ethernet port), Speed (Fast Ethernet port), DPX (Gigabit port), Link (Gigabit port)
LEDs on Rear Panel:
-Interface LED: Link/ACT
-Port Speed LED: Speed

Transmission Distance

Twisted Pair: 100m (Standard CAT5, CAT5e network cable)
Multi Mode Fiber: 1310nm, 5km (100M)
850nm, 550m (1000M)
Single Mode Fiber: 1310nm, 40km/60km (100M)
1550nm, 60km/80km (100M)
1310nm, 10km/40km (1000M)
1550nm, 60km/80km (1000M)

Power Requirements

Power Input: 12VDC (9-18VDC), 24VDC (18-36VDC), 48VDC (36-72VDC), 110VDC (82-185VDC), 220VAC/DC (85-264VAC/120-370VDC)
Power Terminal: 5-pin 5.08mm-spacing plug-in terminal block
Power Consumption: <21.6W
Overload Protection: Support
Reverse Connection Protection: Support
Redundancy Protection: Support

Physical Characteristics

Housing: Aluminum, fanless
Protection Class: IP40
Dimensions (W×H×D): 482.6×44×245mm (19×1.73×9.65 in.)
Weight: 3kg (6.614 pound)
Mounting: 19 inch 1U Rack mounting

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: 5 to 95% (non-condensing)

MTBF

318,296 hrs

Warranty

5 years

Approvals

CE, FCC

Industrial Standard

EMI: FCC CFR47 Part 15, EN55022/CISPR22, Class A

EMS:

IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC61000-4-8 (Power frequency magnetic field): 100A/m (cont.), 1000A/m (1s-3s)
IEC61000-4-9 (Pulsed magnetic field): 1000A/m
IEC61000-4-10 (Damped oscillation): 100A/m
IEC61000-4-12 (Oscillatory wave): 2.5kV/CM, 1kV/DM
IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

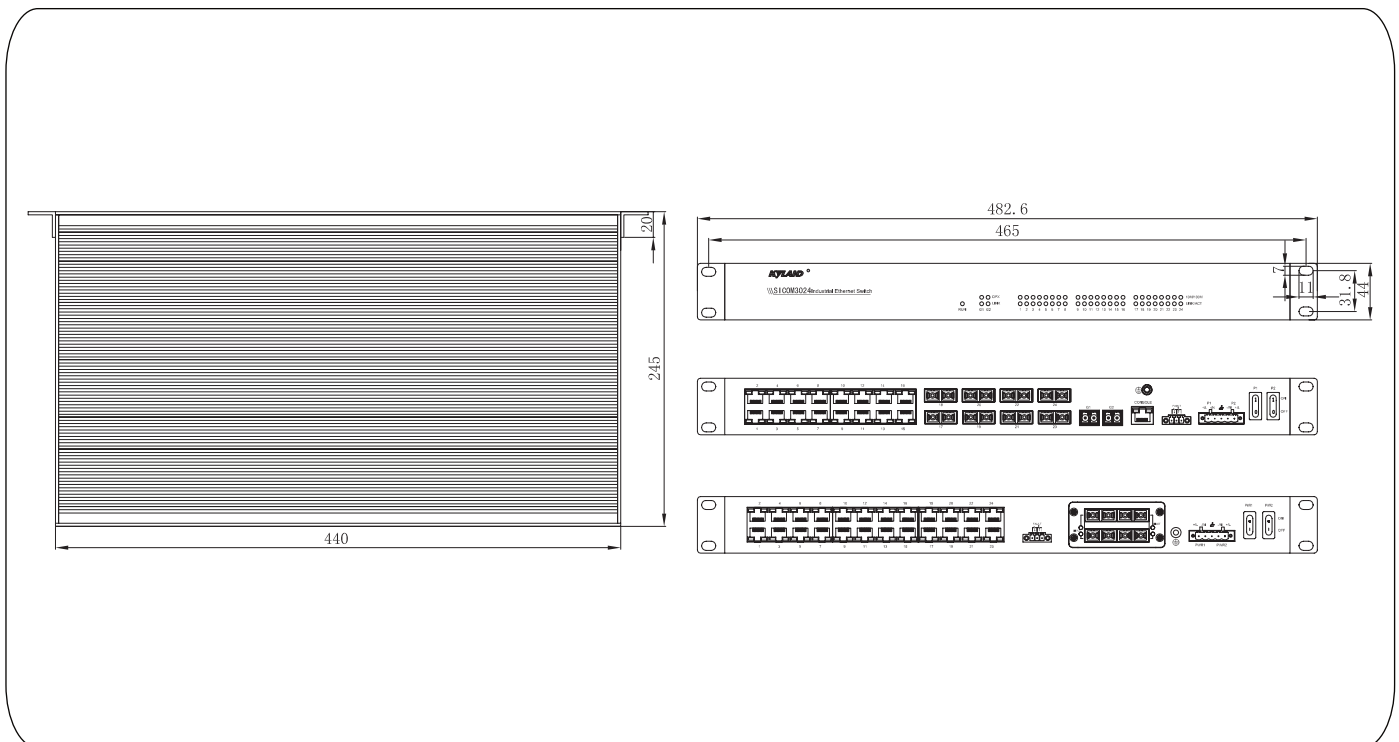
Machinery:

IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)

Industry: IEC61000-6-2

Power: IEC61850-3, IEEE1613
Railway: EN50155, EN50121-4
Traffic Control: NEMA TS-2

Mechanical Drawing



Ordering Information

Model	Gigabit Port	Fast Ethernet Port			Fiber Connector			Power Supply				
	1000Base SFP	100Base-FX Single Mode	100Base-FX Multi Mode	10/100Base-TX	SC	ST	FC	9-18VDC	18-36VDC	36-72VDC	82-185VDC	85-264VAC/120-370VDC
SICOM3024-2GX-24T	2	--	--	24	--	--	--					
SICOM3024-2GX-2S-22T	2	2	--	22								
SICOM3024-2GX-2M-22T	2	--	2	22								
SICOM3024-2GX-2S-16T	2	2	--	16								
SICOM3024-2GX-2M-16T	2	--	2	16								
SICOM3024-2GX-4S-16T	2	4	--	16								
SICOM3024-2GX-4M-16T	2	--	4	16								
SICOM3024-2GX-6S-16T	2	6	--	16								
SICOM3024-2GX-6M-16T	2	--	6	16								
SICOM3024-2GX-8S-16T	2	8	--	16								
SICOM3024-2GX-8M-16T	2	--	8	16								
SICOM3024-2S-24T	--	2	--	24								
SICOM3024-2M-24T	--	--	2	24								
SICOM3024-4S-24T	--	4	--	24								
SICOM3024-4M-24T	--	--	4	24								
SICOM3024-4GX-24T	4	--	--	24	--	--	--					

Note: The models without 2GX ports are also available.

Please Select

Accessories

Model	Description
Gigabit SFP module	Refer to Kyland industrial Gigabit SFP list
DT-FCZ-RJ45-01	RJ45 dustproof shield

Order Codes

SICOM3024 - _____ - _____ - _____ - _____ - _____ - _____
G **FX** **Connector** **Distance** **TX** **PS1** **PS2**

G: Gigabit Ports

2GX=2 Gigabit SFP ports

4GX=4 Gigabit SFP ports

None=No Gigabit port

(Please refer to the order information on available port combinations.)

FX: Fiber Ports

2S= 2 single mode fiber ports

4S= 4 single mode fiber ports

6S= 6 single mode fiber ports

8S= 8 single mode fiber ports

2M= 2 multi mode fiber ports

4M= 4 multi mode fiber ports

6M= 6 multi mode fiber ports

8M= 8 multi mode fiber ports

None=No fiber port

(Please refer to the order information on available port combinations.)

Connector: Fiber Connector

FC= FC connector

SC= SC connector

ST= ST connector

SD= single fiber bi-direction, only for single mode, only SC connector (different price)

Distance: Fiber Distance

2= multi mode, 850nm, 2km

5 (or None)= multi mode, 1310nm, 5km (multi mode default)

40 (or None)= single mode, 1310nm, 40km (single mode default)

60= single mode, 1310nm, 60km (different price)

60L= single mode, 1550nm, 60km (different price)

80L= single mode, 1550nm, 80km (different price)

5T3R= single fiber bi-direction, 1550T/1310R, 20km (different price)

5R3T= single fiber bi-direction, 1550R/1310T, 20km (different price)

40/5T3R= single fiber bi-direction, 1550T/1310R, 40km (different price)

40/5R3T= single fiber bi-direction, 1550R/1310T, 40km (different price)

80/5T3R= single fiber bi-direction, 1550T/1310R, 80km (different price)

80/5R3T= single fiber bi-direction, 1550R/1310T, 80km (different price)

TX: Copper Ports

16T= 16 10/100Base-T(X) ports, RJ45 connector

22T= 22 10/100BaseT(X) ports, RJ45 connector

24T= 24 10/100BaseT(X) ports, RJ45 connector

(Please refer to the order information on available port combinations.)

PS1 and PS2: Power Supply 1 and 2

12= 12VDC (9-18VDC)

24= 24VDC (18-36VDC)

48= 48VDC (36-72VDC)

110= 110VDC (82-185VDC)

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

XX=No power supply (PS2 only)

Example Order Codes

SICOM3024-2GX-4S-SC-16T-24-24

2 Gigabit SFP ports, 4 single mode fiber ports with SC connector, 1310nm 40km, 16 10/100Base TX RJ45 ports, and dual redundant 18-36VDC power supplies.

Note: Please contact sales for different prices.

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