

SICOM3024P

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



- 4 Gigabit fiber/RJ45 optional ports and 24 Fast Ethernet fiber/RJ45 optional ports
- Internal modular design for easy expansion
- Supports DT-Ring protocols and MSTP
- Supports Syslog upload and download
- Exceeds IEC61850-3 and IEEE1613
- Supports power failure alarm
- KEMA, CE, FCC certificates



Overview

SICOM3024P is a KEMA approved IEC61850 compliant managed industrial Ethernet switch specifically designed to operate stably in electrically harsh and climatically demanding utility substation and industrial environments. It offers up to 24 100Base TP/fiber ports, 4 Gigabit SFP slots or 10/100/1000Base-T(X) ports. The redundant function of optical fiber network, independent entire network management channel, redundant power supplies function, and 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, STMP, DHCP, RTC
- Network Security: supports DT-Psec, SSH, SSL, ACL
- Device Management: supports FTP upgrade, also supports Syslog upload and download
- Device Maintenance: supports port mirroring
- Alarm Output: supports IP/MAC conflicts, power, temperature, 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, DHCP server;
STMP, RTC;
DT-Psec, SSH, SSL, ACL;
FTP, Syslog;
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: 4Mbit
Packet Forwarding Rate: 9.5Mpps
Switching Delay: <5μs

Interface

Gigabit Ethernet Ports: 4 1000Base SFP slots or 4 10/100/1000Base-TX RJ45 ports
Fast Ethernet Ports: max 24 100Base-FX, SM/MM ports, FC/SC/ST connector or 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
-Alarm LED: Alarm
-Power LED: PWR1, PWR2
-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: 24VDC (18-36VDC), 48VDC (36-72VDC), 110VDC (82-185VDC), 220VAC/DC (85-264VAC/120-370VDC)
Power Terminal: 3-pin 9.5mm-spacing terminal block
Power Consumption: <35W
Overload Protection: Support
Reverse Connection Protection: Support
Redundancy Protection: Support

Physical Characteristics

Housing: Aluminum, fanless
Protection Class: IP40
Dimensions (W×H×D): 482.6×44×420mm (19×1.73×16.54 in.)
Weight: <5kg (11.023 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

346,889 hrs

Warranty

5 years

Approvals

KEMA, State Grid (A type), 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)

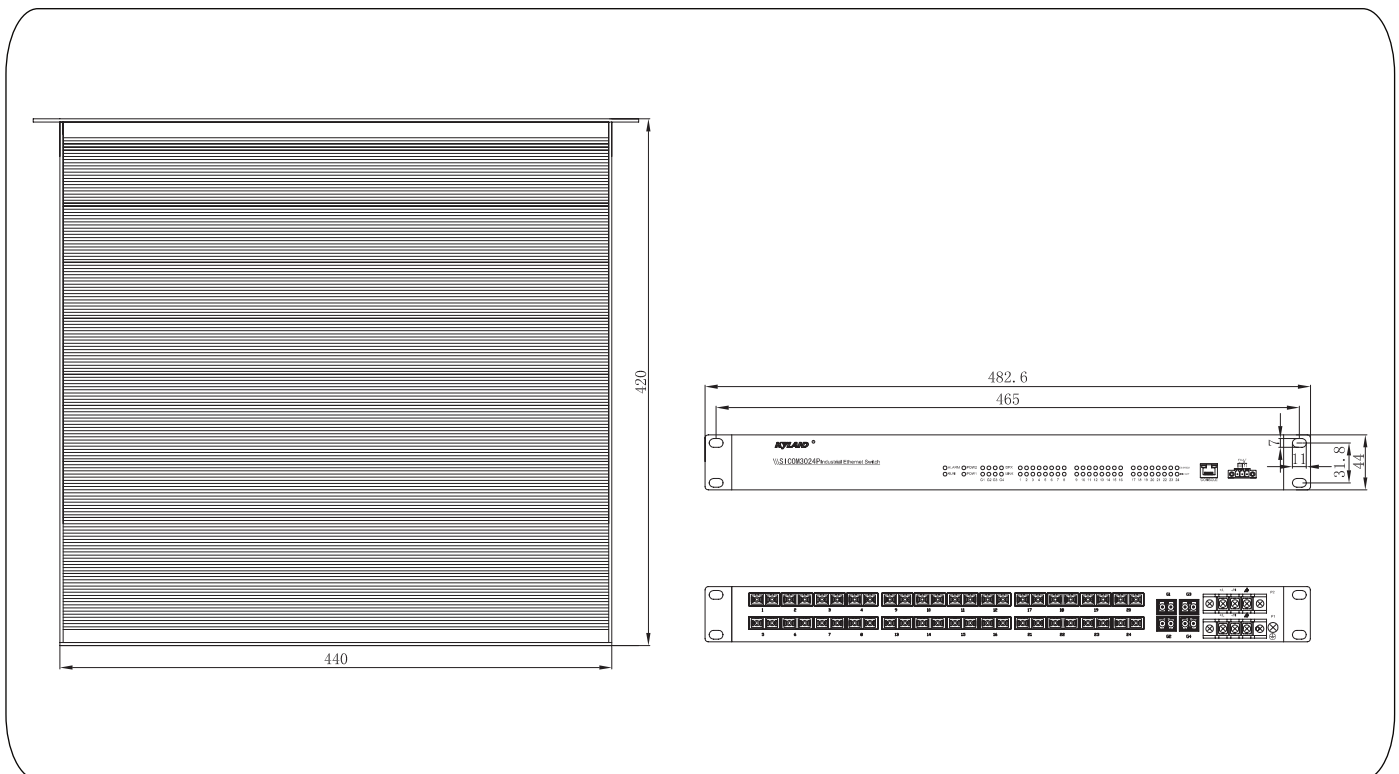
Machinery:

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 or 10/100/1000Base-TX | 100Base-FX Single Mode | 100Base-FX Multi Mode | 10/100Base-TX | SC | ST | FC | 18-36VDC | 36-72VDC | 82-185VDC | 85-264VAC/120-370VDC |
| SICOM3024P-4GX(E)-4S-20T | 4 | 4 | -- | 20 | | | | | | | |
| SICOM3024P-4GX(E)-4M-20T | 4 | -- | 4 | 20 | | | | | | | |
| SICOM3024P-4GX(E)-8S-16T | 4 | 8 | -- | 16 | | | | | | | |
| SICOM3024P-4GX(E)-8M-16T | 4 | -- | 8 | 16 | | | | | | | |
| SICOM3024P-4GX(E)-12S-12T | 4 | 12 | -- | 12 | | | | | | | |
| SICOM3024P-4GX(E)-12M-12T | 4 | -- | 12 | 12 | | | | | | | |
| SICOM3024P-4GX(E)-16S-8T | 4 | 16 | -- | 8 | | | | | | | |
| SICOM3024P-4GX(E)-16M-8T | 4 | -- | 16 | 8 | | | | | | | |
| SICOM3024P-4GX(E)-20S-4T | 4 | 20 | -- | 4 | | | | | | | |
| SICOM3024P-4GX(E)-20M-4T | 4 | -- | 20 | 4 | | | | | | | |
| SICOM3024P-4GX(E)-24S | 4 | 24 | -- | -- | | | | | | | |
| SICOM3024P-4GX(E)-24M | 4 | -- | 24 | -- | | | | | | | |
| SICOM3024P-4GX(E)-24T | 4 | -- | -- | 24 | -- | -- | -- | | | | |
| SICOM3024P-4GX(E)-2S-22T | 4 | 2 | -- | 22 | | | | | | | |
| SICOM3024P-4GX(E)-2M-22T | 4 | -- | 2 | 22 | | | | | | | |

Please Select

Note: Models without Gigabit ports are also available.

Accessories

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

Order Codes

SICOM3024P - - - - - - -

G FX Connector Distance TX PS1 PS2

G: Gigabit Ports

4GX=4 Gigabit SFP ports

4GE=4 10/100/1000Base-TX RJ45 ports

XX=No Gigabit ports

(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

8S= 8 single mode fiber ports

12S= 12 single mode fiber ports

16S= 16 single mode fiber ports

20S= 20 single mode fiber ports

24S= 24 single mode fiber ports

2M= 2 multi mode fiber ports

4M= 4 multi mode fiber ports

8M= 8 multi mode fiber ports

12M= 12 multi mode fiber ports

16M= 16 multi mode fiber ports

20M= 20 multi mode fiber ports

24M= 24 multi mode fiber ports

(Total 24 100Base TX or FX ports, fiber ports + copper ports = 24)

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

4T= 4 10/100Base-T(X) ports, RJ45 connector

8T= 8 10/100Base-T(X) ports, RJ45 connector

12T= 12 10/100BaseT(X) ports, RJ45 connector

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

20T= 20 10/100BaseT(X) ports, RJ45 connector

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

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

(Total 24 100Base TX or FX ports, fiber ports + copper ports = 24)

PS1 and PS2: Power Supply 1 and 2

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

SICOM3024P-4GX-4S-SC-20T-24-24

4 Gigabit SFP ports, 4 single mode fiber ports with SC connector, 1310nm 40km, 20 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.