

SICOM3024P

24+4G port layer 2 managed rack mountable switches



» Overview

SICOM3024P is a layer 2 managed industrial Ethernet switch designed to operate reliably in electrically harsh and climatically demanding utility substation and industrial environments. SICOM3024P supports up to 4 gigabit fiber/copper ports and 24 fast Ethernet fiber/copper ports, meets the IEC61850 and IEEE1613 standards and approved by KEMA. SICOM3024P is a 19-inch 1U rack mountable device and its internal modular design offers the maximum flexibility for easy expansion. SICOM3024P supports many Layer 2 software features such as port, VLAN, multicast, QoS, fast redundant ring. It supports Console, Telnet, Web management and network management software based on SNMP. At present, the product is widely used at the intelligent substation and many other industrial communication systems.

» Key Features

supports max 4 gigabit fiber/copper ports and 24 fast Ethernet fiber/copper ports

Internal modular design for easy expansion

Supports DT-Ring ,DRP, RSTP for network redundancy

Supports IEC61850 MMS management(special firmware)

Supports alarm and syslog upload

Complies with IEC61850-3 and IEEE1613

KEMA, CE, FCC, UL, NEMA TS2

» Product Specifications

>Software Functions

-Switching Function

Supports VLAN and PVLAN

Supports GVRP

Supports port aggregation

Supports flow control

Supports port rate limit

Supports broadcast storm suppression

Supports static ARP

Supports ARP aging time

Supports static MAC address

Supports MAC aging time

Supports MAC learning setting

-Redundancy Protocol

Supports DHP and DRP and the recovery time<20 ms

Supports DT-Ring, DT-Ring+, and DT-VLAN and the recovery time<50 ms

Supports STP/RSTP/MSTP

-Multicast Protocol

Supports IGMP snooping , query and IGMP cross

Supports GMRP

Supports static multicast

-Security

Supports IEEE 802.1x、

Supports HTTPs/SSL

Supports SSH

Supports RADIUS

Supports TACACS+

Supports user grading

Supports user login timeout

Supports enhanced password

Supports port isolate

Supports MAC learning limit

Supports remote access security

-Service Quality Management

Supports ACL

Supports 802.1p(CoS),DSCP

Supports SP and WRR queuing

-Management & Maintenance

Supports Console, Telnet, and Web management

Supports SNMPv1/v2c/v3 and can managed by Kyvision

Supports IEC61850 MMS server

Supports software update via FTP

Supports configuration upload/download via FTP/HTTP

Supports the IP/MAC address conflict alarm, power failure alarm, power alarm, temperature alarm, port alarm, port flow alarm , CPU/memory usage alarm , login/logout alarm , config change alarm , and ring alarm

Supports RMON

Supports port mirroring

Supports Syslog , save to flash or send to log server

Supports LLDP

Supports Link-check

-IP Address Management

Supports DHCP server/client/snooping/option 82

-Clock Management

Supports SNTP server/client

Supports RTC

Supports time zone and daylight saving time

>Product Specifications

-Standard

IEEE 802.3i(10Base-T)

IEEE 802.3u(100Base-TX and 100Base-FX)

IEEE 802.3ab(1000Base-T)

IEEE 802.3z(1000Base-SX/LX)

IEEE 802.3ad (port aggregation)

IEEE 802.3x(flow control)

IEEE 802.1p(priority)

IEEE 802.1Q(VLAN)

IEEE 802.1w(RSTP)

-Switch Properties

Priority queue: 4

Number of VLANs: 256

VLAN ID: 1–4093

Number of multicast groups: 256

MAC table: 8K

Packet buffer: 4Mbit

Packet forwarding rate: 9.5Mpps

Switching delay:<10μs

-Interface

Gigabit ports:

1000Base-X, SFP port

10/100/1000Base-T(X), RJ45 port

Fast Ethernet ports:

100Base-FX, single/multi mode, SC/ST/FC connector

100Base-FX, SFP port(LC connector)

10/100Base-T(X), RJ45 port

Console port: RS232,RJ45

Alarm contact: 3-pin 5.08mm-spacing plug-in terminal block, 250 VAC/220 VDC Max, 2 A Max, 60 W Max

-LED

LED on front panel

Running LED: Run

Alarm LED: Alarm

Power LED: PWR1, PWR2

Port LED: Link/ACT

Port speed LED: Speed

LED on rear panel

Port LED: Link/ACT

Port speed LED: Speed

-Power Requirements

Power input:

24VDC(18-36VDC),

48VDC(36-72VDC),

100-240VAC,50/60Hz;110-220VDC (85-264VAC/77-300VDC)

Power terminal: 5-pin 5.08 mm-spacing plug-in terminal block

Power consumption:<35w

Overload protection: Support

Reverse connection protection: Support

Redundancy protection: Support

-Physical Characteristics

Housing: Metal

Cooling: Natural cooling, fanless

Protection Class: IP40

Dimensions(WxHxD): 482.6mm×44mm×322.5mm

Weight: 4Kg

Mounting: 19 inch 1U rack mounting

-Environmental Limits

Operating temperature: -40°C to +85°C

Storage temperature: -40°C to +85°C

Ambient Relative Humidity: 5% - 95% (non-condensing)

-Quality Assurance

MTBF: 502802 hrs

Warranty: 5 years

-Approvals

KEMA: Models with power supply of HV:100-240VAC,50/60Hz;110-220VDC

CE: Models with power supply of HV:100-240VAC,50/60Hz;110-220VDC

FCC: Models with power supply of HV:100-240VAC,50/60Hz;110-220VDC

UL508,Class I,Div2: All models

NEMA TS2: Models with power supply of HV:100-240VAC,50/60Hz;110-220VDC

IEC 61850-3, IEEE 1613

IEC 62368-1, EN 62368-1

-Industry Standard

EMI:

FCC CFR47 Part 15,EN55022/CISPR22,Class A

EMS:

IEC61000-4-2(ESD) $\pm 8\text{kV}$ (contact), $\pm 15\text{kV}$ (air)

IEC61000-4-3(RS) 10V/m (80MHz-2GHz)

IEC61000-4-4(EFT) Power Port: $\pm 4\text{kV}$;Data Port: $\pm 2\text{kV}$

IEC61000-4-5(Surge) Power Port: $\pm 2\text{kV/DM}$, $\pm 4\text{kV/CM}$;Data Port: $\pm 2\text{kV}$

IEC61000-4-6(CS) 3V (10kHz-150kHz); 10V (150kHz-80MHz)

IEC61000-4-8(power frequency magnetic field) 100A/m (cont.), 1000A/m (1s-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)

Climatic environmental:

IEC60068-2-1 Cold test

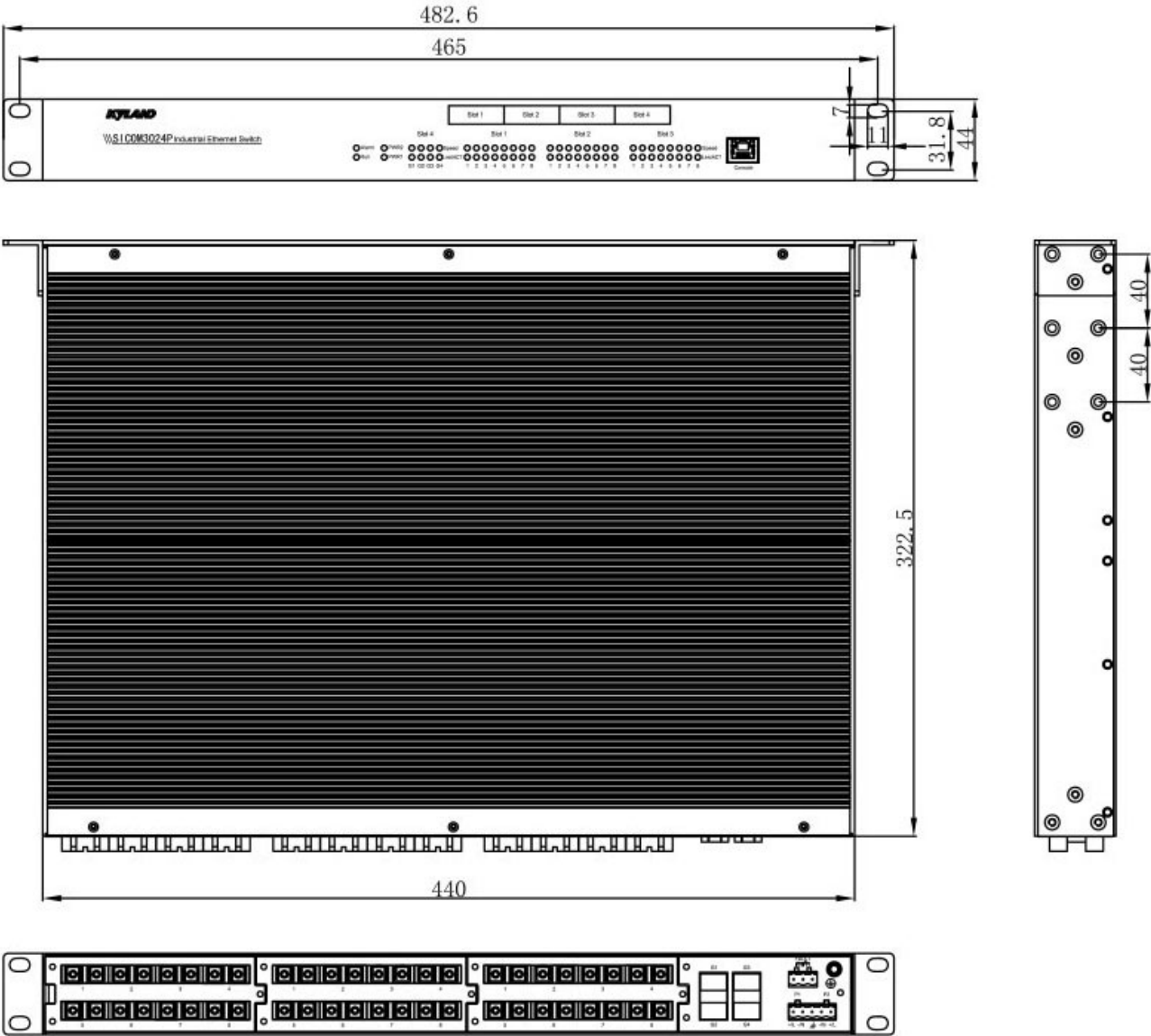
IEC60068-2-2 Dry heat test

IEC60068-2-14 Change of temperature test

IEC60068-2-30 Damp heat cyclic test

IEC60068-2-78 Damp heat steady state test

Mechanical Drawing



» Ordering Information

Recommended model

Product Model :SICOM3024P-Ports-Connector-PS1-PS2	
Ports	Description
4GX8SFP8T	4 1000Base-X SFP ports, 8 100Base-X SFP ports, 16 10/100Base-TX RJ45 ports
4GX24SFP	4x1000Base-X,10/100/1000Base-T(X) SFP port; 24x100Base-FX,SFP port
4GX16SFP8T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 16x100Base-FX,SFP port; 8x10/100Base-T(X) RJ45 port
4GX12SFP12T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 12x100Base-FX,SFP port; 12x10/100Base-T(X) RJ45 port
4GX16M	4x1000Base-X,10/100/1000Base-T(X) SFP port; 16x100Base-FX,multi-mode fiber port
4GX8M16T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 8x100Base-FX,multi-mode fiber port; 16x10/100Base-T(X) RJ45 port

4GX8S16T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 8x100Base-FX,single-mode fiber port; 16x10/100Base-T(X) RJ45 port
4GX4M20T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 4x100Base-FX,multi-mode fiber port; 20x10/100Base-T(X) RJ45 port
4GX4S20T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 4x100Base-FX,single-mode fiber port; 20x10/100Base-T(X) RJ45 port
4GX24T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 24x10/100Base-T(X) RJ45 port
4GX16T	4x1000Base-X,10/100/1000Base-T(X) SFP port; 16x10/100Base-T(X) RJ45 port
2GX8M16T	2x1000Base-X,10/100/1000Base-T(X) SFP port; 8x100Base-FX,multi-mode fiber port; 16x10/100Base-T(X) RJ45 port
2GX8S16T	2x1000Base-X,10/100/1000Base-T(X) SFP port; 8x100Base-FX,single-mode fiber port; 16x10/100Base-T(X) RJ45 port
2GX24T	2x1000Base-X,10/100/1000Base-T(X) SFP port; 24x10/100Base-T(X) RJ45 port
2GX16T	2x1000Base-X,10/100/1000Base-T(X) SFP port; 16x10/100Base-T(X) RJ45 port
2GX8T	2x1000Base-X,10/100/1000Base-T(X) SFP port; 8x10/100Base-T(X) RJ45 port
24SFP	24x100Base-FX,SFP port
16SFP	16x100Base-FX,SFP port
16SFP8T	16x100Base-FX,SFP port; 8x10/100Base-T(X) RJ45 port
12SFP12T	12x100Base-FX,SFP port; 12x10/100Base-T(X) RJ45 port
8SFP16T	8x100Base-FX,SFP port; 16x10/100Base-T(X) RJ45 port
4SFP20T	4x100Base-FX,SFP port; 20x10/100Base-T(X) RJ45 port
16M8T	16x100Base-FX,multi-mode fiber port; 8x10/100Base-T(X) RJ45 port
16S8T	16x100Base-FX,single-mode fiber port; 8x10/100Base-T(X) RJ45 port
12M12T	12x100Base-FX,multi-mode fiber port; 12x10/100Base-T(X) RJ45 port
12S12T	12x100Base-FX,single-mode fiber port; 12x10/100Base-T(X) RJ45 port
8M16T	8x100Base-FX,multi-mode fiber port; 16x10/100Base-T(X) RJ45 port
8S16T	8x100Base-FX,single-mode fiber port; 16x10/100Base-T(X) RJ45 port
8M8T	8x100Base-FX,multi-mode fiber port; 8x10/100Base-T(X) RJ45 port
8S8T	8x100Base-FX,single-mode fiber port; 8x10/100Base-T(X) RJ45 port
4M20T	4x100Base-FX,multi-mode fiber port; 20x10/100Base-T(X) RJ45 port
4S20T	4x100Base-FX,single-mode fiber port; 20x10/100Base-T(X) RJ45 port
2M22T	2x100Base-FX,multi-mode fiber port; 22x10/100Base-T(X) RJ45 port
2S22T	2x100Base-FX,single-mode fiber port; 22x10/100Base-T(X) RJ45 port
24T	24x10/100Base-T(X) RJ45 port
Connector	100M fiber port specifications
SC05	SC connector, multi-mode, 1310nm, 5km
ST05	ST connector, multi-mode, 1310nm, 5km
SC40	SC connector, single-mode, 1310nm, 40km
ST40	ST connector, single-mode, 1310nm, 40km
SC60	SC connector, single-mode, 1310nm, 60km
SC80	SC connector, single-mode, 1550nm, 80km
None	No 100M fiber port or connector is SFP
PS1	Power input 1
HV	100-240VAC,50/60Hz;110-220VDC(85-264VAC/77-300VDC)
L1	48VDC(36-72VDC)

L3	24VDC(18-36VDC)
PS2	Power input 2
HV	100-240VAC,50/60Hz;110-220VDC(85-264VAC/77-300VDC)
L1	48VDC(36-72VDC)
L3	24VDC(18-36VDC)
None	no redundant power supply

PO(Demo)	
SICOM3024P-4GX2 4SFP-L3-L3	4x1000Base-X,10/100/1000Base-T(X) SFP port; 24x100Base-FX,SFP port; 24VDC(18-36VDC),Dual power supply
SICOM3024P-16M 8T-ST05-HV	16x100Base-FX,multi-mode fiber port,ST connector,1310nm, 5km; 8x10/100Base-T(X) RJ45 port; 100-240VAC,50/60Hz;110-220VDC(85-264VAC/77-300VDC), Single power supply

Accessories	Description
Gigabit SFP module	See the selection table of industrial gigabit SFP module
100M SFP module	See the selection table of industrial 100M SFP module
DT-FCZ-RJ45-01	Single-port RJ45 dust plug

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