

SICOM6424SM



24+4G Port Layer 3 Managed Rack Mountable Switches

- Supports max 4 gigabit fiber/copper ports and 24 fast Ethernet fiber/copper ports
- Internal modular design for easy expansion
- Supports Layer 3 routing protocols such as RIP, OSPF and PIM
- Supports DT-Ring , MSTP and VRRP for network redundancy
- Complies with IEC 61850-3 and IEEE1613
- IP40 protection class
- CE, FCC certification

Overview

SICOM6424SM is a layer 3 managed industrial Ethernet switch designed to operate reliably in electrically harsh and climatically demanding utility substation and industrial environments. SICOM6424SM supports up to 4 gigabit fiber/copper ports and 24 fast Ethernet fiber/copper ports, it meets the IEC 61850 and IEEE1613 standards. SICOM6424SM is a 19-inch 1U rack mountable device and allows the front and rear panel mounting. SICOM6424SM offers hardware wire-speed layer 3 switching, and supports many Layer 2 software features such as port, VLAN, multicast, QoS, fast redundant ring and Layer 3 functions such as VRRP, RIP, OSPF and PIM. It supports Console, Telnet, Web management and network management software based on SNMP. SICOM6424SM can provide solutions with high performance and high reliability for the industrial communication systems.

Software functions

Switching Function

- Supports VLAN
- Supports GVRP
- Supports port aggregation
- Supports flow control
- Support port rate limit

Redundancy Protocol

- Supports VRRP
- Supports DT-Ring, DT-Ring+, and DT-VLAN and the recovery time<50 ms
- Supports RSTP/MSTP and compatible with STP

Multicast Protocol

- Supports IGMP v1/v2
- Supports IGMP snooping
- Supports static multicast
- Supports PIM-SM, PIM-DM

Version: V1.1

Routing Protocol

- Supports RIPv1/v2
- Supports OSPFv2
- Supports static routing

Service Quality Management

- Supports ACL
- Supports SP and WRR queuing

Management & Maintenance

- Supports Console, Telnet, and Web management methods
- Supports SNMPv1/v2c and can managed by Kyvision
- Supports file transfer and software update over FTP and TFTP
- Supports the power failure alarm, power alarm, port alarm, and ring alarm
- Supports port mirroring
- Supports Syslog
- Supports LLDP
- Supports RTC

IP Address Management

- Supports Bootp
- Supports DHCP server/relay/client

Product Specifications

Technical Specifications

- Standard
 - ▼ IEEE 802.3i (10Base-T)
 - ▼ IEEE 802.3u (100Base-T)
 - ▼ IEEE 802.3ab (1000Base-T)

- ▼ IEEE 802.3ad (port aggregation)
- ▼ IEEE 802.3z (1000Base-SX/LX)
- ▼ IEEE 802.3x (flow control)
- ▼ IEEE 802.1p (priority)
- ▼ IEEE 802.1Q (VLAN)
- ▼ IEEE 802.1w (RSTP)
- ▼ IEEE 802.1s (MSTP)

Switch Properties

Priority queue	8
Number of VLANs	4K
VLAN ID	1-4093
Number of multicast groups	256
Routing table	16K
MAC table	16K
Packet buffer	512 Mbit
Packet forwarding rate	9.5 Mpps
Switching delay	< 10 μs

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	
▼ 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, LINK
- ▼ Port speed LED: 10M/100M
- ▼ Port duplex LED: DPX

Power Requirements

Power input	
▼ 24DC(18-36VDC)	
▼ 48DC(36-72VDC)	
▼ 220AC/DCW(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×420mm (19×1.73×16.54 in.)
▼ Weight	5Kg (11.02 pound)
Mounting	19 inch 1U rack mounting

Environmental Limits

Operating temperature	-40°C to +85°C (-40°F to 185°F)
Storage temperature	-40°C to +85°C (-40°F to 185°F)
Ambient Relative Humidity	5% - 95% (non-condensing)

Quality Assurance

MTBF	365,000 hrs
Warranty	5 years

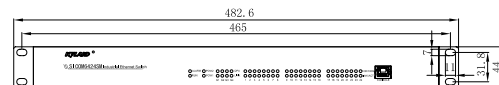
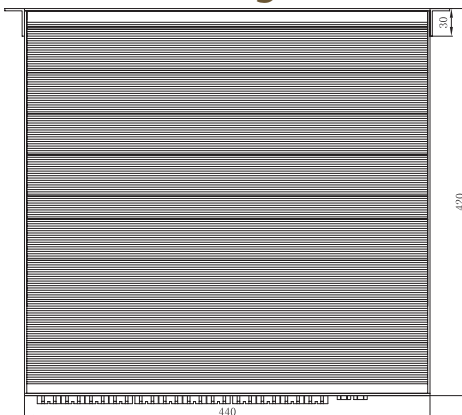
Approvals

CE, FCC
Please check Kyland website for the latest updates.

Industry 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)

Mechanical Drawing



Order Information

SICOM6424SM-Ports-Connector-PS1-PS2

Ports

4GX24S	4x1000Base-X SFP Port;24x100Base-FX, single-mode fiber port
4GX24M	4x1000Base-X SFP Port;24x100Base-FX, multi-mode fiber port
4GX20S4T	4x1000Base-X SFP Port;20x100Base-FX, single-mode fiber port;4x10/100Base-T(X) RJ45 port
4GX20M4T	4x1000Base-X SFP Port;20x100Base-FX, multi-mode fiber port;4x10/100Base-T(X) RJ45 port
4GX16S8T	4x1000Base-X SFP Port;16x100Base-FX single-mode fiber port;8x10/100Base-T(X) RJ45 port
4GX16M8T	4x1000Base-X SFP Port;16x100Base-FX multi-mode fiber port;8x10/100Base-T(X) RJ45 port
4GX12S12T	4x1000Base-X SFP Port;12x100Base-FX single-mode fiber port;12x10/100Base-T(X) RJ45 port
4GX12M12T	4x1000Base-X SFP Port;12x100Base-FX multi-mode fiber port;12x10/100Base-T(X) RJ45 port
4GX8S16T	4x1000Base-X SFP Port;8x100Base-FX single-mode fiber port;16x10/100Base-T(X) RJ45 port
4GX8M16T	4x1000Base-X SFP Port;8x100Base-FX multi-mode fiber port;16x10/100Base-T(X) RJ45 port
4GX4S20T	4x1000Base-X SFP Port;4x100Base-FX single-mode fiber port;20x10/100Base-T(X) RJ45 port
4GX4M20T	4x1000Base-X SFP Port;4x100Base-FX multi-mode fiber port;20x10/100Base-T(X) RJ45 port
4GX24T	4x1000Base-X SFP Port;24x10/100Base-T(X) RJ45 port
4GE24S	4x10/100/1000Base-T(X) RJ45 port;24x100Base-FX single-mode fiber port
4GE24M	4x10/100/1000Base-T(X) RJ45 port;24x100Base-FX multi-mode fiber port
4GE20S4T	4x10/100/1000Base-T(X) RJ45 port;20x100Base-FX single-mode fiber port;4x10/100Base-T(X) RJ45 port
4GE20M4T	4x10/100/1000Base-T(X) RJ45 port;20x100Base-FX multi-mode fiber port;4x10/100Base-T(X) RJ45 port
4GE16S8T	4x10/100/1000Base-T(X) RJ45 port;16x100Base-FX single-mode fiber port;8x10/100Base-T(X) RJ45 port
4GE16M8T	4x10/100/1000Base-T(X) RJ45 port;16x100Base-FX multi-mode fiber port;8x10/100Base-T(X) RJ45 port
4GE12S12T	4x10/100/1000Base-T(X) RJ45 port;12x100Base-FX single-mode fiber port;12x10/100Base-T(X) RJ45 port
4GE12M12T	4x10/100/1000Base-T(X) RJ45 port;12x100Base-FX multi-mode fiber port;12x10/100Base-T(X) RJ45 port
4GE8S16T	4x10/100/1000Base-T(X) RJ45 port;8x100Base-FX single-mode fiber port;16x10/100Base-T(X) RJ45 port
4GE8M16T	4x10/100/1000Base-T(X) RJ45 port;8x100Base-FX multi-mode fiber port;16x10/100Base-T(X) RJ45 port
4GE4S20T	4x10/100/1000Base-T(X) RJ45 port;4x100Base-FX single-mode fiber port;20x10/100Base-T(X) RJ45 port
4GE4M20T	4x10/100/1000Base-T(X) RJ45 port;4x100Base-FX multi-mode fiber port;20x10/100Base-T(X) RJ45 port
4GE24T	4x10/100/1000Base-T(X) RJ45 port;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
FC05	FC connector, multi-mode, 1310nm, 5km
SC40	SC connector, single-mode, 1310nm, 40km
ST40	ST connector, single-mode, 1310nm, 40km
FC40	FC connector, single-mode, 1310nm, 40km
SC60	SC connector, single-mode, 1310nm, 60km
SC80	SC connector, single-mode, 1550nm, 80km

PS1

HV	220AC/DCW(85-264VAC/77-300VDC)
L1	48DC(36-72VDC)
L3	24DC(18-36VDC)

PS2

HV	220AC/DCW(85-264VAC/77-300VDC)
L1	48DC(36-72VDC)
L3	24DC(18-36VDC)
None	No secondary power supply

Accessories

Accessory Model

Description

Gigabit SFP module	See the selection table of industrial gigabit SFP module.
DT-FCZ-RJ45-01	Single-port RJ45 dust plug