

SICOM3024 Series



Features

- DT-Ring for ring network, star, chain, double ring network etc
- DT-Ring (recovery time <50ms)
- 4 x 100M fiber ring, 2 x 1000M fiber ring at the most
- Support IGMP, TRUNK, Port Mirroring, Qos, VLAN
- Broadcasting storm control
- Hyper terminal, Telnet (CLI), WEB management software, SNMP-based network management, OPC supervision
- Store and forward switching mode
- 32G Backplane switching capacity
- Able to monitor the flow, status of each port (RMON, statistics, alarm, event)
- EMC industrial level 4 (comply with IEC61850 standard)
- Uniform network management software of SICOM3000/4000/6000: Kyvision 3.0
- Wide operating Temperature: -35°C~75°C
- IP40 protection, fanless ribbed design
- Stable rack-mounting installation



Parameters

Port Type and Quantity	
TP Port	0-24x10/100Base-T(X), Adaptive, full/half-duplex, auto MD/MDI-X connection
100M fiber port	0-8 x100Base-FX (FC/SC/ST socket)
1000M fiber port	0-2 x1000Base-L/HX (SFP)
CONSOLE interface	RS232, RJ45
Techniques	Support IEEE802.3z, IEEE 802.3u, IEEE 802.3, IEEE802.3x, IEEE802.1D/w, IEEE802.1p, IEEE802.1Q/, store and forward swithing mode
MAC Address Table Size	32K

Network Structure	Ring, tangent, star, and chain network
Type of cable	
Twisted Pair (TP)	Distance: 100m
Multimode fiber	Distance: 2-5km Wavelength: 1310nm
Singlemode fiber	Distance: 10Km/20Km/40Km/80Km Wavelength: 1310nm/1550nm
Power requirements	
Power input	DC24V (DC18V-36V), DC110V, DC220V, AC220V
Power consumption	<15W
Ambient conditions	
Operating temperature	-35°C~75°C
Storage temperature	-45°C to +85°C
Relative humidity (non-condensing)	10% to 95%
MTBF	35years
Mechanical construction	
Protection class	IP40, fanless ribbed design
Mouting	Rack-mounting (19' 1U)
Dimensions (W x H x D)	482.6mm x 44mm x 245mm

Main Functions

DT-ring

Each TP port or fiber port of SICOM3024 series is able to configure as common mode or redundant mode. It is up to the users to choose to establish 1000M or 100M redundant ring. Recovery time of DT-ring is less than **50ms**.

DT-ting+

DT-ring+ is able to redundantly connect multiple rings supporting DT-ring protocol.

PTP Precision Time Protocol (IEEE1588)

PTP is for precision time protocol (IEEE1588), and makes IEEE1588 standard within synchronous precise of sub-microsecond range. It is used for synchronous limited network requiring high-precision distributed time. Synchronous communication is not a special must to distribute control tasks and make it possible to separate communication time mode and program operation time mode. Being representative and open is another advantage of IEEE1588. A lot of system integrators use this standard in their products and different devices manufacturers follow the same standard to ensure a good synchronization among products.

Broadcast Storm Control

SYCOM6000 series offers broadcast storm protection ensuring the smooth communication platform of the switch network. The switch will filter out the over flow once the bandwidth of broadcast flow exceed the limit.

VLAN

VLAN will divide one network into multiple logical subnets. Data packets cannot be transmitted between different VLANs so as to control the broadcast domain and segment flow and improve the reliability, security and manageability. SYCOM6000 series supports IEEE802.1q VLAN tag. It can be divided into up to 4094 VLANs based on ports. The VLAN division can be realized via WEB, CLI, Kyvision3.0 software.

QoS Priority

IEEE 802.1p is the most popular priority solution in the LAN environment. SYCOM6000 series supports 802.1p standard, by which you can configure the port-based priority when the terminal does not support 802.1p and different priority for the ports is wanted.

Alarming Function

SYCOM6000 series offers the alarming functions including power failure, port link and network alarm. Through management software, all the alarming functions can be configured functionally. The alarming information is shown either through alarm contact or from management interface.

Configuration for Working Mode of Port

SYCOM6000 series is able to configure the working mode of all ports through management: full/half duplex adaptive, enforced full/half duplex, 10M/100M adaptive, enforced 100M full-duplex for 10M/100M fiber ports, enforced 1000M full-duplex for 1000M fiber/TP ports.

Port Rate Configuration

SYCOM6000 series is able to configure the rate of all ports through management as any integer multiple of 32kbps.

RMON Network Monitor

RMON network management expands to physical layer and able to collect data of devices independently. The build-in monitor offers network resource and won't occupy any bandwidth, with a limited ability to analyze the whole flow. It supports four group including statistics, history, alarm and event. In addition, it permits the working station to configure the grouping of multiple variables in the way of expression to enhance the affectivity of transmitting management messages and reduce the load of working station. All the features enable you to manage the large network easily.

Multicasting (IGMP)

IGMP is Internet Group Multicast Protocol. SYCOM6000 series offers IGMP monitor and query functions. Data packets can be transmitted to multiple necessary host computers to prevent overloading. This solves the problems of occupied bandwidth when broadcasting.

OPC Uniform Management of Networking Devices

In the SCADA software of industrial automation, OPC offers a bridge between hardware manufacturer and software developer. By the OPC Server interface of communication devices and other hardware, the software developer does not need to consider the differences of hardware and is able to get the information from hardware, and integrates all the information from the top level software for reference of

decision-makers.

Support Browser/CLI/SNMP-based Network Management Configuration

SICOM3024 support WEB browser, CLI (Command-Line Interface) management software, and SNMP-based network management, users could configure the switch flexibly.

APPROVALS

EN61000-4-2 (ESD): $\pm 8\text{kV}$ (contact discharge), $\pm 15\text{kV}$ (air discharge)

EN61000-4-3 (RS): 10V/m (80-1000MHz)

EN61000-4-4 (EFT) : $\pm 4\text{kV}$ power line, $\pm 4\text{kV}$ data line

EN61000-4-5 (Surge): $\pm 4\text{kV}$ (line/earth), $\pm 4\text{kV}$ (line/line) power line, $\pm 2\text{kV}$ data line

EN61000-4-6 (CS): 3V (10kHz~150 kHz), 10V (150kHz~80 kHz)

FCC CFR47 Part 15: FCC CFR47 Part 15 Class A

EN55022: EN55022 Class A

UL60950, CE, FCC

Ordering Information

Model	Description
SICOM3024-16T	16×100Base-TX
SICOM3024-24T	24×100Base-TX
SICOM3024-2S(M)-22T	22×100Base-TX, 2×100Base-FX
SICOM3024-4S(M)-20T	20×100Base-TX, 4×100Base-FX
SICOM3024-6S(M)-18T	18×100Base-TX, 6×100Base-FX
SICOM3024-8S(M)-16T	16×100Base-TX, 8×100Base-FX
SICOM3024-2GX-24T	24×100Base-TX, 2×1000Base-TX/LX/LH
SICOM3024-2GX-2S(M)-22T	22×100Base-TX, 2×1000Base-TX/LX/LH, 2×100Base-FX
SICOM3024-2GX-2S(M)-20T	20×100Base-TX, 2×1000Base-TX/LX/LH, 4×100Base-FX
SICOM3024-2GX-2S(M)-18T	18×100Base-TX, 2×1000Base-TX/LX/LH, 6×100Base-FX
SICOM3024-2GX-2S(M)-16T	16×100Base-TX, 2×1000Base-TX/LX/LH, 8×100Base-FX
SM-SFP-RJ45	1×1000base-T , SFP, RJ45 socket
SM-SFP-LX/LC	1×Gigabit SFP, SM, 10km, Wavelength: 1310nm, LC connector
SM-SFP-LH/LC-40	1×Gigabit SFP, SM, 40km, Wavelength: 1310nm, LC connector
SM-SFP-LH/LC-80	1×Gigabit SFP, SM, 80km, Wavelength: 1550nm, LC connector