# 24+4G Port Robust Managed Industrial Ethernet Switch

Version: 101216

#### SICOM3024-M12

24+4G Port Robust Managed Industrial Ethernet Switch



CE, FCC, ROHS Chinese Military Certification

### **Overview**

SICOM3024-M12 is a high-performance network-managed industrial Ethernet switch specially designed by KYLAND for industrial and military applications supporting up to 24 10/100Base-T(X) ports with M12 connectors and 4 1000Base-LX/LH ports with YMF15-LC connectors. It also supports DT-Ring protocol and Kyvision management software.

#### **Features**

- 1. 4 1000Base-LX/LH ports with YMF15-LC connectors and 24 10/100Base-T(X) ports with M12 connectors
- 2. Supports DT-Ring protocols (recovery time<50ms), RSTP/STP (IEEE802.1w/d) redundant protocol
- 3. Flexible network topologies: ring, chain, star, and tangent ring
- 4. Advanced ring topology protocol avoiding broadcast storm
- 5. Supports IGMP Snooping, port trunking, port mirroring, QoS, VLAN and link aggregation
- 6. Supports port speed limitation and special broadcast storm control
- 7. Safe MAC and port binding function, static FDB supported
- 8. Bandwidth configuration controls port bandwidth properly
- 9. Supports multiple management functions including CLI, TELNET, WEB, SNMP V1/V2/V3 and OPC
- 10. EMC industrial level 4, specially designed for harsh electromagnetic interference environment
- 11. Abundant power supply options, dual redundant power supplies for military usage
- 12. Supports relay alarm output for the failure of power
- 13. Conforms with Chinese military standards of GJB150 and GJB151A-97
- 14. Operating temperature: -40 to 85°C (-40 to 185°F)
- 15. Ribbed aluminum case for heat dissipation, fanless design
- 16. Rack-mounting (19 inch 3U) installation
- 17. IP43 protection class
- 18. Unified management software for SICOM series: Kyvision 3.0

# **Technical Specifications**

#### Standard

IEEE802.3z

IEEE 802.3u

IEEE 802.3

IEEE802.3x IEEE802.1d

IFFF802.1w

IEEE802.1p

IEEE802.1q

Store and forward switching mode

#### Network

Ring, chain, star and tangent ring network topology

#### Interface

Gigabit Ethernet Ports: 4 x 1000Base-LX/LH ports with YMF15-LC connectors

Fast Ethernet Ports: 24 x 10/100Base-T(X) ports with M12 connectors CONSOLE Interface: RS232, M12

Alarm Port: 250VAC/350VDC Max; 120mA Max, M12

LED Indicators: RUN, PWR1, PWR2; LINK/ACT (G1-G4); LINK/ACT, 10M/100M (1-24)

#### **Performance**

Back plane switching capacity: 12.8G MAC Address Table Size: 8K

#### Cable

Twisted Pair: 0-100m

Multi Mode Fiber: 1310nm, 0-5km (100Mbps); 1310nm 0-2km (1000Mbps)

(1000Mbps)

Single Mode Fiber: 1310nm, 0-40km; 1550nm, 0-80km

#### **Power Requirements**

Power input: 24VDC (18-36VDC), 48VDC (36-72VDC), 110VDC 220VDC, 220VAC, dual redundant power supplies

Power terminal: Y50DP40 Power consumption: <20W

#### **Physical Characteristics**

Casing: Ribbed aluminum case (fanless)

Protection class: IP43

Installation: 19 inch 3U rack-mounting

Dimensions (WxHxD): 482.6x132.5x245mm (19x5.22x9.65 in.)

Weight: 3kg (6.614 pound)

#### **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: 0 to 95% (non-condensing)

#### **Approvals**

IEC61000-4-2 (ESD): ±8KV contact discharge, ±15KV air discharge

IEC61000-4-3 (RS): 10V/M (80-1000MHz)

IEC61000-4-4 (EFT): power line ±4KV, data line ±2KV

IEC61000-4-5 (Surge): power line ±4KV CM/±2KV DM, data line ±2KV

IEC61000-4-6 (CS): 3V (10KHZ-150KHZ), 10V (150KHz-80MHz)

IEC61000-4-8 (Power frequency magnetic field): 100A/m cont. 1000A/m, 1s to 3s

IEC61000-4-12/18 (Damped oscillatory wave): 2.5KV CM, 1KV DM

IEC61000-4-10 (Damped oscillatory): 30A/m

IEC61000-4-16 (Common mode conduct): 30V cont. 300V, 1s

FCC CFR47 Part 15/EN55022: Class A & B

IEC61000-4-16 (Common mode conduct): 30V cont. 300V, 1s

FCC CFR47 Part 15/EN55022: Class A & B

Chinese Military Standard GJB151A-97, GJB150 parameters

CE101: 25Hz-10KHz power lead conducted emission

CE102: 10KHz-10MHz power lead conducted emission

CS101: 25Hz-50KHz power lead conducted susceptibility

CS114: 10KHz-400MHz bulk cable injection conducted susceptibility

# SICOM3024-M12

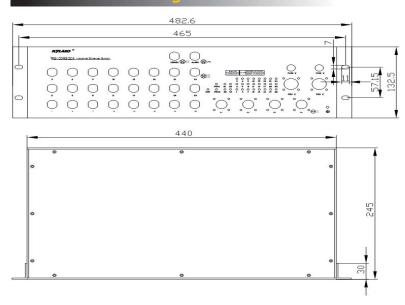
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CS116: 10KHz-100MHz cable and power cable damped sine

transient conduction susceptibility

RE101: 25Hz-100kHz magnetic field radiation emission RE102: 10kHz-18GHz electric field radiation emission RS101: 25Hz-100kHz magnetic field radiation susceptibility RS103: 10kHz-18GHz electric field radiation susceptibility

## **Mechanical Drawing**



GJB150-11-86: Anti salt fog GJB150-6-86: Temperature GJB150-16-86: Vibration CE, FCC, RoHS, Chinese Military Certification

#### MTBF

35 years

Warranty

5 years

# **Ordering Information**

Model	Description
SICOM3024-24T-M12	Managed Ethernet switch with 24 10/100Base-T(X) ports, M12 connector, -40 to 85°C operating temperature
SICOM3024-4G-24T-M12	Managed Ethernet switch with 4 1000Base-LX/LH ports, YMF15-LC connector, 24 10/100Base-T(X) ports, M12 connector, -40 to 85°C operating temperature

Power supply: 24VDC, 48VDC, 110VDC, 220VAC/DC

#### **Accessories**

Connector	Port
M12-4 Pin-99-3729-810-04	10/100Base-T(X) ports, CONSOLE Interface, Alarm Port
3 Pin round-Y50DP40-1203TJ41	Power Port
YMF Adapter Flange	
YMF15F02C1D40N-S	YMF Fiber Port
Optical Fiber Jumper with Ruggedized Connector	
YMF15T02B1P40N-2FC-C5*2-2S3/0.3-single mode-3m YMF15T02B1P40N-YMF15T02B1P40N-C5*2-S5-single mode-5m YMF15T02B1P40N-DLC-C5*2-2S5/0.15-single mode-5m YMF15T02B1P11N-YMF15T02B1P11N-C5*2-S3-single mode-3m YMF15T02B1P11N-DLC-C5*2-2S3/0.15-single mode-3m	YMF Fiber port

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