

**SICOM3016**20 Port Managed  
Industrial Ethernet SwitchCE, FCC, RoHS  
Chinese State Grid  
Certification**Overview**

SICOM3016 is a high-performance network-managed industrial Ethernet switch specially designed by KYLAND for industrial applications. It's DIN-Rail installation and supports max 4 100Base-FX and 16 10/100Base-T(X) ports. Its high-performance switch engine, solid and closed case, high-efficient single-rib-shape case for heat dissipation without using fans, overcurrent, overvoltage and EMC protection at power input side, and excellent EMC protection of RJ45 port allow SICOM3016 to work in harsh and dangerous industrial environments. The redundant function of optical fiber network, independent entire network management channel, dual redundant power inputs function, and powerful entire network real-time management system provide multiplex guarantee for reliable operation of the system.

**Features**

- Supports 4 100Base-FX ports and 16 10/100Base-T(X) RJ45 ports
- Supports DT-Ring protocols (Recovery time<50ms), RSTP/STP (IEEE802.1w/d) redundant protocol
- Flexible network topologies: ring, chain, star and tangent ring
- Advanced ring topology protocol avoiding broadcast storm
- Supports IGMP Snooping, port trunking, port mirroring, QoS, VLAN, ACL
- Supports port speed limitation and special broadcast storm control
- Safe MAC and port binding function, static FDB supported
- Bandwidth configuration controls port bandwidth properly
- Improves network monitoring ability through RMON (group 1, 2, 3 and 9)
- Supports multiple management methods including CLI, TELNET, WEB, SNMP V1/V2/V3 and OPC
- EMC industrial level 4, specially designed for harsh electromagnetic interference environment
- Abundant power supply options, dual redundant DC power inputs
- Relay alarm output for the loss of power
- Operating temperature: -40 to 85°C (-40 to 185°F)
- Ribbed aluminum case for heat dissipation (patent), fanless design
- DIN-Rail and Wall mounting installation
- IP40 protection class
- Unified management software for SICOM series: Kyvision3.0.

**Technical Specifications****Standard**

IEEE802.3  
IEEE 802.3u  
IEEE 802.3x  
IEEE802.1d  
IEEE802.1w  
IEEE802.1p  
IEEE802.1q  
Store and forward switching mode

**Network**

Ring, chain, star and tangent ring network topology

**Interface**

100M Fiber Ports: 4 x 100Base-FX ports, FC/SC/ST  
10/100M Copper Ports: 16 x 10/100Base-T(X) ports, RJ45  
CONSOLE Interface: RS232, RJ45  
Alarm Contact: 2-Pin 3.81mm-spacing plug-in terminal block, 250VAC/350VDC Max; 120mA Max  
LED Indicator: RUN, ALARM, PWR1, PWR2; LINK/ACT (17-20); LINK/ACT, 10M/100M (1-16)

**Performance**

Backplane switching capacity: 8.8G  
MAC Address Table Size: 8K

**Cable**

Twisted Pair: 0-100m (Standard CAT5, CAT5e network cable)  
Multi Mode Fiber: 1310nm, 0-5km (100Mbps)  
Single Mode Fiber: 1310nm, 0-40km; 1550nm, 0-80km

**Power Requirements**

Power input: 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs; 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC) single power input  
Power terminal:  
3-Pin 3.81mm-spacing plug-in terminal block (24VDC, 48VDC);  
3-Pin 7.62mm-spacing plug-in terminal block (110VAC/110VDC, 220VAC/220VDC)  
Power consumption: <15W

**Physical Characteristics**

Casing: Ribbed aluminum case (fanless)  
Protection class: IP40  
Installation: DIN-Rail  
Dimensions (WxHxD): 75x165x123mm (2.95x6.50x4.84 in.)  
Weight: 1.2kg (2.646 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  
 IEC61000-6-2 (Industrial Standards), IEC61850-3 (Substations),  
 IEEE1613 (Electric Power Substations), EN50121-4 (Railway Applications)

CE, FCC, ROHS, Chinese State Grid Certification

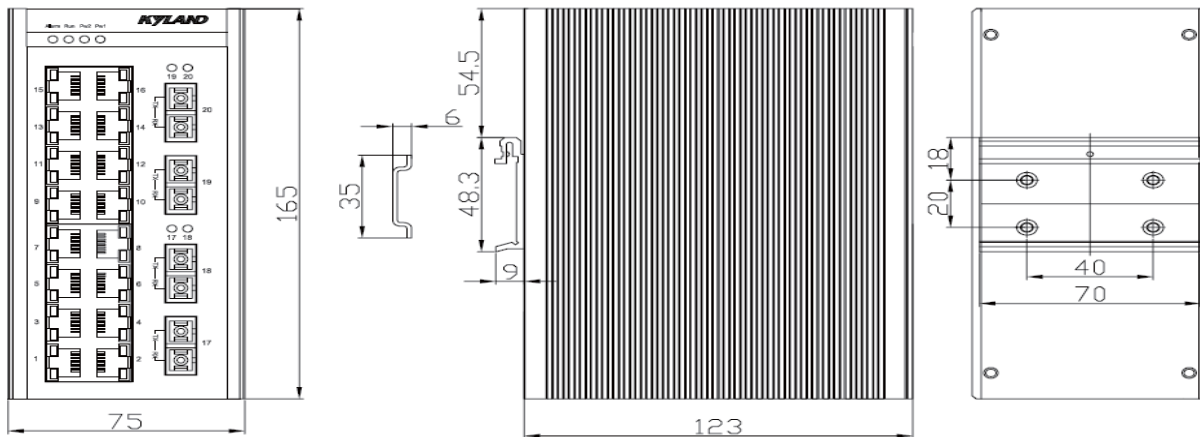
### MTBF

35 years

### Warranty

5 years

## Mechanical Drawing



## Ordering Information

Model	Description
SICOM3016-4S-16T	Managed Ethernet switch with 4 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-4M-16T	Managed Ethernet switch with 4 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-3S-16T	Managed Ethernet switch with 3 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-3M-16T	Managed Ethernet switch with 3 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-2S-16T	Managed Ethernet switch with 2 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-2M-16T	Managed Ethernet switch with 2 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature

Model	Description
SICOM3016-1S-16T	Managed Ethernet switch with 1 100Base-FX ports, single mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-1M-16T	Managed Ethernet switch with 1 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-16T	Managed Ethernet switch with 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-4S-8T	Managed Ethernet switch with 4 100Base-FX ports, single mode, FC/SC/ST connector, 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-4M-8T	Managed Ethernet switch with 4 100Base-FX ports, multi mode, FC/SC/ST connector, 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-3S-8T	Managed Ethernet switch with 3 100Base-FX ports, single mode, FC/SC/ST connector, 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-3M-8T	Managed Ethernet switch with 3 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-2S-8T	Managed Ethernet switch with 2 100Base-FX ports, single mode, FC/SC/ST connector, 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-2M-8T	Managed Ethernet switch with 2 100Base-FX ports, multi mode, FC/SC/ST connector, 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-1S-8T	Managed Ethernet switch with 1 100Base-FX ports, single mode, FC/SC/ST connector, 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-1M-8T	Managed Ethernet switch with 1 100Base-FX ports, multi mode, FC/SC/ST connector, 16 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature
SICOM3016-8T	Managed Ethernet switch with 8 10/100Base-T(X) ports, RJ45 connector, 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs, 110VAC/110VDC (85-165VAC/66-154VDC), 220VAC/220VDC (132-300VAC/176-400VDC), single power input, -40 to 85°C operating temperature

Power supply: 24VDC, 48VDC, dual redundant power inputs,  
110VAC/110VDC, 220VAC/220VDC, single power input

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