SICOM3016

Layer 2 20 Port Managed Din-Rail IEC61850 Switch

- 4 100Base-FX SM/MM ports, 16 10/100Base-TX ports
- Supports DT-Ring protocols
- SNMPv3, HTTPS, SSH security features
- EMC performance reaches industrial level 4
- Supports 110DC, 220AC/DCW power input
- CE, FCC certificates

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 & Benefits

1. Redundancy Technology: supports DT-Ring protocols (recovery time<50ms) and MSTP
2. Multicast Protocol: supports IGMP Snooping, GMRP and static multicast
3. Network Partition: supports VLAN, PVLAN
4. Service Quality: supports QoS
5. Bandwidth Management: supports port trunking, port speed limit, broadcast storm control
6. Network Management and Monitoring: supports CLI, Telnet, WEB management methods, Kyvision centralized management, SNMPv1/v2/v3, RMON, LLDP, SNTP, DHCP
7. Network Security: supports DT-Psec, SSH, SSL, ACL
8. Device Management: supports FTP upgrade
9. Device Maintenance: supports port mirroring
10. Alarm Output: supports IP/MAC conflicts, power, port and ring alarms
11. Special Function: supports Link Check and Loop Status Check

Technical Specifications

Standard
IEEE 802.3i
IEEE 802.3u
IEEE 802.3x
IEEE 802.1p
IEEE 802.1Q
IEEE 802.1s

Protocols
DT-Ring, DT-Ring+, DT-VLAN, MSTP;
IGMP Snooping, GMRP;
VLAN, PVLAN;
Telnet, HTTP, HTTPS, SNMPv1/v2/v3, RMON, LLDP, SNTP, DHCP server;
DT-Psec, SSH, SSL, ACL;
FTP;
ARP, QoS

Switch Properties
Priority Queues: 4
Number of VLANs: 256
VLAN ID: 1-4094
Number of Multicast Groups: 256
MAC Table: 8K
Packet Buffer: 2Mbit
Packet Forwarding Rate: 3.0Mpps
Switching Delay: <5μs

Interface
Fast Ethernet Fiber Ports: max 4 100Base-FX SM/MM ports, FC/SC/ST connector
Fast Ethernet RJ45 Ports: 16 10/100Base-TX RJ45 ports
Console Port: RS232 (RJ45 connector)
Alarm Contact: 2-pin 3.81mm-spacing plug-in terminal block, 250VAC/350VDC Max, 120mA Max

LED
LEDs on Front Panel:
Running LED: Run
Alarm LED: Alarm
Power LED: PWR1, PWR2
Interface LED: Link/ACT, Speed (RJ45 port)

Transmission Distance
Twisted Pair:
100m (Standard CAT5, CAT5e network cable)
Multi Mode Fiber:
1310nm, 5km (100M)
Single Mode Fiber:
1310nm, 40km/60km (100M)
1550nm, 60km/80km (100M)

Power Requirements
Power Input: 24DC (18-36VDC), 48DC (36-72VDC), 110DC (66-154VDC), 220AC/DCW (132-300VAC/176-400VDC)
Power Terminal:
3-pin 3.81mm-spacing plug-in terminal block (24DC, 48DC)
3-pin 7.62mm-spacing plug-in terminal block (110DC, 220AC/DCW)
Power Consumption: <9.7W
Overload Protection: Support
Reverse Connection Protection: Support
Redundancy Protection: Support

Physical Characteristics
Housing: Aluminum, fanless
Protection Class: IP40
Dimensions (W×H×D): 75×165×123mm (2.95×6.50×4.84 in.)
Weight: 1.2kg (2.646 pound)
Mounting: DIN-Rail or Panel mounting

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: 5 to 95% (non-condensing)

MTBF
333,775 hrs

Warranty
5 years

Approvals
CE, FCC

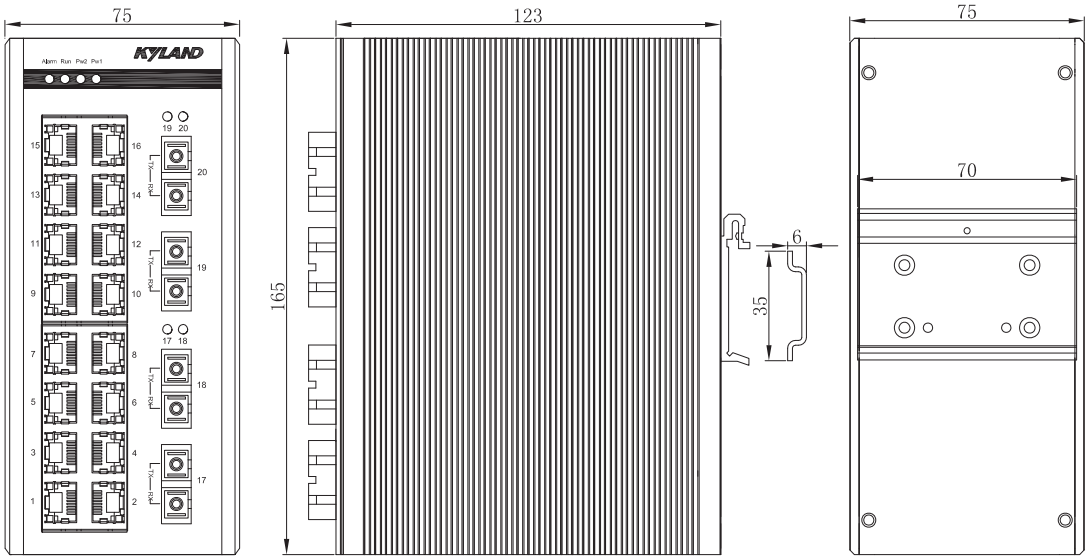
Industrial Standard
EMI: FCC CFR47 Part 15, EN55022/CISPR22, Class A

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

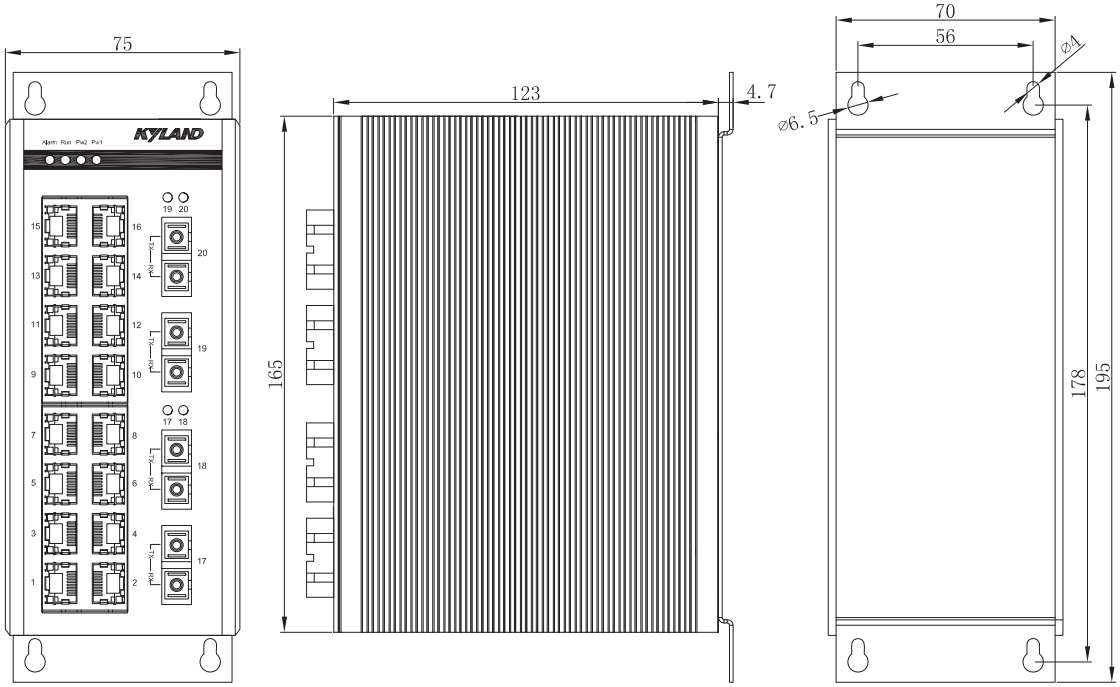
Machinery:
IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)

Industry: IEC61000-6-2
Railway: EN50155, EN50121-4
Traffic Control: NEMA TS-2

Mechanical Drawing



Din Rail Installation



Panel Mounting Installation

Ordering Information

SICOM3016 - _____ - _____ - _____ - ___
Ports Distance Connector PS

Ports

4M-16T	=	4 100Base-FX multi mode ports, 16 10/100Base-TX ports
4S-16T	=	4 100Base-FX single mode ports, 16 10/100Base-TX ports
2M-16T	=	2 100Base-FX multi mode ports, 16 10/100Base-TX ports
2S-16T	=	2 100Base-FX single mode ports, 16 10/100Base-TX ports
4M-8T	=	4 100Base-FX multi mode ports, 8 10/100Base-TX ports
4S-8T	=	4 100Base-FX single mode ports, 8 10/100Base-TX ports
2M-8T	=	2 100Base-FX multi mode ports, 8 10/100Base-TX ports
2S-8T	=	2 100Base-FX single mode ports, 8 10/100Base-TX ports

Distance: Fiber Distance

1310-5	=	1310nm, 5km
1310-40	=	1310nm, 40km
1310-60	=	1310nm, 60km
1550-80	=	1550nm, 80km

Connector: Fiber Connector

None	=	No fiber port
SC	=	SC Connector
ST	=	ST Connector
FC	=	FC Connector

PS: Power Supply

24DC	=	18-36VDC, dual redundant power inputs
48DC	=	36-72VDC, dual redundant power inputs
110DC	=	66-154VDC, single power input
220AC/DC	=	132-300VAC/176-400VDC, single power input

Example Order Codes

SICOM3016-4M-16T-1310-5-SC-24DC
4 100M multi mode 1310nm 5km fiber ports with SC connector, 16 10/100Base-TX RJ45 ports, 24DC dual power inputs.