SICOM3016B

Layer 2 16+4G Port Managed Din-Rail IEC61850 Switch

- 4 Gigabit ports and 16 10/100Base-TX ports
- Supports DT-Ring protocols and MSTP
- Compact DIN-Rail product
- Intelligent network management
- Advanced security features
- Provides power failure alarm
- EMC performance reaches industrial level 4
- CE, FCC certificates

Overview

SICOM3016B 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 combo Gigabit SFP slots or 10/100/1000Base-T(X) ports 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 SICOM3016B 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, port and ring alarms
11. Special Function: supports Link Check and Loop Status Check

Technical Specifications

Standard

IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, 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: 4Mbit
Packet Forwarding Rate: 8.3Mpps
Switching Delay: <5μs

Interface

Gigabit Ethernet Port Combinations:
1) 4 combo 1000Base SFP slots or 10/100/1000Base-TX ports
2) 2 combo 1000Base SFP slots or 10/100/1000Base-TX ports and 2 10/100/1000Base-TX ports
Fast Ethernet Ports: 16 10/100Base-TX RJ45 ports
Console Port: RS232 (RJ45 connector)
Alarm Contact: 3-pin 3.81mm-spacing plug-in terminal block, 250VAC/220VDC Max, 2A Max, 60W 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:
850nm, 550m (1000M)
Single Mode Fiber:
1310nm, 10km/40km (1000M)
1550nm, 60km/80km (1000M)

Power Requirements
Power Input:
24DC (18-36VDC), 48DC (36-72VDC), 220AC/DC (120-300VDC/85-264VAC)
Power Terminal:
5-pin 5.08mm-spacing plug-in terminal block
Power Consumption: <13.3W

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
334,038 hrs

Warranty
5 years

Approvals
CE, FCC

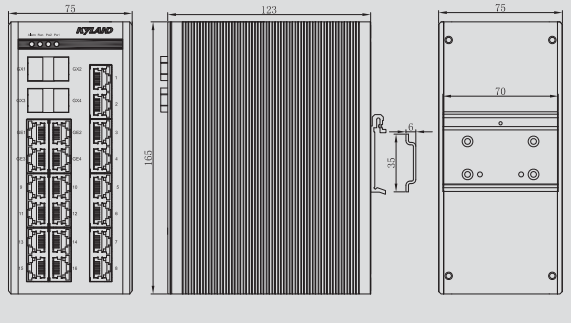
Industrial Standard
EMI:
FCC CFR47 Part 15, EN55022/CISPR22, Class A

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)

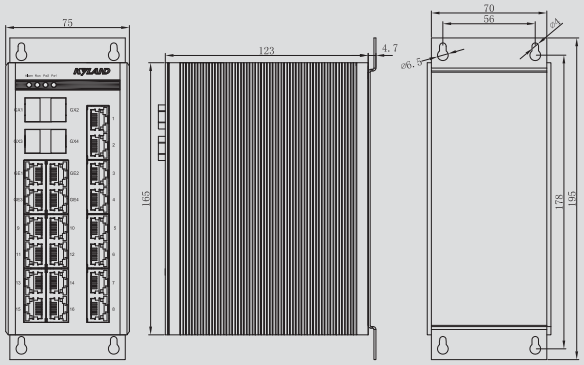
Machinery:
IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)

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

Mechanical Drawing



Din Rail Installation



Panel Mounting Installation

Ordering Information

SICOM3016B - _____ - ____
Ports PS

Ports
4GX/GE-16T = 4 Gigabit combo ports, 16 10/100Base-TX RJ45 ports
2GX/GE-2GE-16T = 2 Gigabit combo ports, 2 10/100/1000Base-TX RJ45 ports, 16 10/100Base-TX RJ45 ports

PS: Power Supply
24DC =18-36VDC, dual redundant power inputs
48DC = 36-72VDC, dual redundant power inputs
220AC/DCW = 77-300VDC/85-264VAC, single power input

Example Order Codes
SICOM3016B-4GX/GE-16T-24DC
4 Gigabit combo ports, 16 10/100Base-TX RJ45 ports, 24DC (18-36VDC) dual redundant power inputs