

SICOM3009

Layer 2 9 Port Managed Din-Rail IEC61850 Switch



- Green Ethernet solution with ultra low power consumption design
- As low as 3.9 watts full load power consumption
- Coal mining safety design
- 6 10/100Base-TX ports, 2 or 3 100Base-FX ports
- Supports DT-Ring protocols and RSTP
- Supports one-key recovery
- Ethernet ports can withstand 1500VAC power frequency voltage



Overview

SICOM3009 is a low power consumption managed industrial Ethernet switch specially designed by KYLAND for industrial applications. It supports 3 100Base-FX ports and 6 10/100Base-T(X) ports. Its fanless ribbed casing design and ability to handle a wide range of temperatures ensure high reliability in extreme industrial environments. Its full load power consumption is less than 5W, and it has passed Mine Safety Certification. Based on Kyvision3.0, CLI, WEB interface, it offers concentrative management. The state-of-the-art OPC software enables the switch's management embedded in various industrial systems.

Features & Benefits

- Redundancy Technology: supports DT-Ring protocols (recovery time < 50ms) and RSTP
- Multicast Protocol: supports IGMP Snooping and static multicast
- Network Partition: supports VLAN, GVRP, PVLAN
- Service Quality: supports QoS
- Bandwidth Management: supports port trunking, port speed limit, broadcast storm control
- Network Management and Monitoring: supports CLI, Telnet, WEB management methods, Kyvision centralized management, SNMPv1/v2/v3, RMON, LLDP, STMP, DHCP
- Network Security: supports MAC address binding with port, IEEE802.1X, SSH, SSL, TACACS+
- Device Management: supports FTP upgrade
- Device Maintenance: supports port mirroring
- Alarm Output: supports power, port and ring alarms
- Special Function: supports Link Check and Loop Status Check

Technical Specifications

Standard

IEEE802.3i, IEEE802.3u, IEEE802.3x, IEEE802.3ac, IEEE802.1p, IEEE802.1Q, IEEE802.1w, IEEE802.1X

Protocols

DT-Ring, DT-Ring+, DT-VLAN, RSTP;
IGMP Snooping;
VLAN, GVRP, PVLAN;
Telnet, HTTP, HTTPS, SNMPv1/v2/v3, RMON, LLDP, STMP, DHCP server;
SSH, SSL, TACACS+;
FTP, QoS

Switch Properties

Priority Queues: 4
Number of VLANs: 256
VLAN ID: 1-4094
Number of Multicast Groups: 256
MAC Table: 8K
Packet Buffer: 1Mbit
Packet Forwarding Rate: 1.4Mpps
Switching Delay: < 5μs

Interface

Fast Ethernet Fiber Ports: max 3 100Base-FX, SM/MM ports, FC/SC/ST connector
Fast Ethernet RJ45 Ports: 6 10/100Base-TX RJ45 ports
Console Port: RS232 (RJ45 connector)
Alarm Output 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
Ring LED: Alarm
Power LED: PWR
LED showing AC/DC power input: AC/DC
Interface LED: Link/ACT, Speed (RJ45 port)

Button

Reset: System reset
Default: System default configuration

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: 24VDC (18-36VDC), 48VDC (36-72VDC)
Power Terminal: 5-pin 5.08mm-spacing plug-in terminal block
Power Consumption: 3.9W (full load)
Overload Protection: Support
Reverse Connection Protection: Support
Redundancy Protection: Support

Physical Characteristics

Housing: Aluminum, fanless
Protection Class: IP40
Dimensions (W×H×D): 55.4×139×119.5mm (2.18×5.47×4.70 in.)
Weight: 0.6kg (1.323 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

376,919 hrs

Warranty

5 years

Approvals

UL508 (pending), Class 1 Div 2 (pending), 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)
IEC61000-4-8 (Power frequency magnetic field): 100A/m (cont.), 1000A/m (1s-3s)
IEC61000-4-10 (Damped oscillation): 100A/m
IEC61000-4-12 (Oscillatory wave): 2.5kV/CM, 1kV/DM
IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

Machinery:

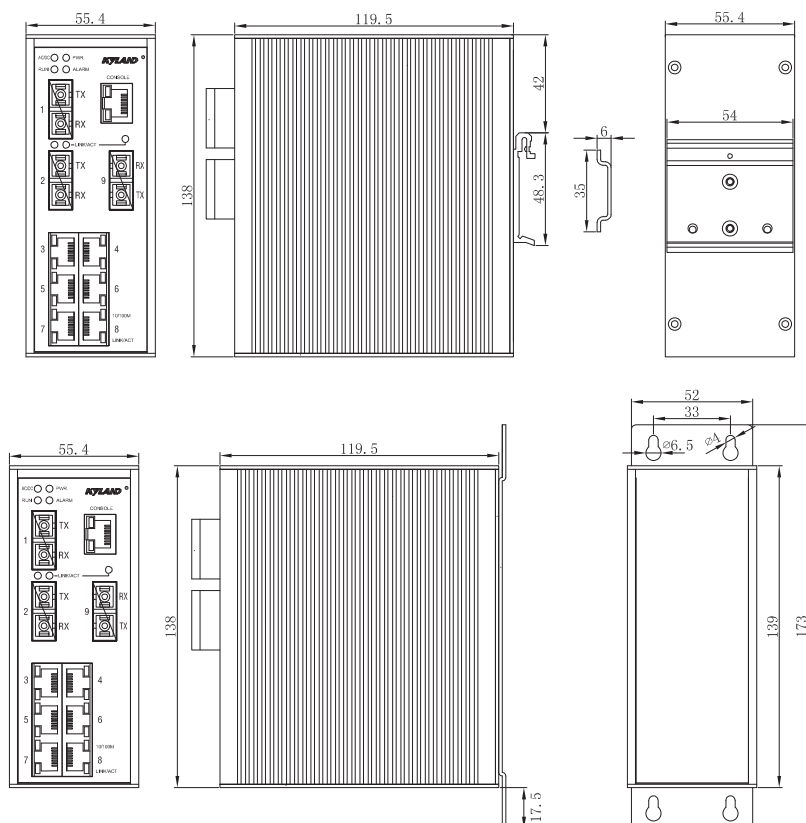
IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)

Industry: IEC61000-6-2

Power: IEC61850-3, IEEE1613

Railway: EN50155, EN50121-4

Mechanical Drawing



Ordering Information

Model	Fast Ethernet Port			Fiber Connector			Power Supply	
	100Base-FX Single Mode	100Base-FX Multi Mode	10/100Base-TX	SC	ST	FC	18-36VDC	36-72VDC
SICOM3009-3S-6T	3	--	6					
SICOM3009-3M-6T	--	3	6					
SICOM3009-2S-6T	2	--	6					
SICOM3009-2M-6T	--	2	6					

Please Select

Accessories

Model	Description
DT-BGAZ-04	Panel mounting kit
DT-FCZ-RJ45-01	RJ45 dustproof shield

Order Codes

SICOM3009- _____ - _____ - _____ - _____ - _____
FX Connector Distance TX PS

FX: Fiber Ports

2S= 2 100Base-FX single mode fiber ports
 3S= 3 100Base-FX single mode fiber ports
 2M= 2 100Base-FX multi mode fiber ports
 3M= 3 100Base-FX multi mode fiber ports

Connector: Fiber Connector

FC= FC connector
 SC= SC connector
 ST= ST connector
 SD= single fiber bi-direction, only for single mode, only SC connector (different price)

Distance: Fiber Distance

2= multi mode, 850nm, 2km
 5 (or None)= multi mode, 1310nm, 5km (multi mode default)
 40 (or None)= single mode, 1310nm, 40km (single mode default)
 60= single mode, 1310nm, 60km (different price)
 60L= single mode, 1550nm, 60km (different price)
 80L= single mode, 1550nm, 80km (different price)
 5T3R= single fiber bi-direction, 1550T/1310R, 20km (different price)
 5R3T= single fiber bi-direction, 1550R/1310T, 20km (different price)
 40/5T3R= single fiber bi-direction, 1550T/1310R, 40km (different price)
 40/5R3T= single fiber bi-direction, 1550R/1310T, 40km (different price)
 80/5T3R= single fiber bi-direction, 1550T/1310R, 80km (different price)
 80/5R3T= single fiber bi-direction, 1550R/1310T, 80km (different price)

TX: Copper Ports

6T= 6 10/100Base-T(X) ports, RJ45 connector

PS: Power Supply

24= 24VDC (18-36VDC), dual power inputs

48= 48VDC (36-72VDC), dual power inputs

Example order codes

SICOM3009-3M-SC-6T-24

3 100Base-FX multi mode fiber ports, SC connectors, 1310nm 5km, 6 10/100Base-TX RJ45 ports, 24VDC (18-36VDC) power supply, dual power inputs, -40 to 85C wide operating temperature

Note: Please contact sales for different prices.