

SICOM3005



6 Port Managed Din-Rail Serial Server Function Integrated Programmable Switch

- Supports DT-Ring protocols and MSTP
- Integrates industrial Ethernet switch with serial server, supports 4 RS232/RS485 ports
- Serial ports support TCP Server/Client, UTP working mode, supports one-key recovery
- EMC performance reaches industrial level 4
- IP40 protection class
- CE, FCC certificates



Overview

SICOM3005 is a serial server function integrated programmable industrial Ethernet switch. It is developed under Linux platform supporting redevelopment. It supports 4 serial ports, 2 100M copper/fiber ports and 3 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. 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 MSTP
- Multicast Protocol: supports IGMP Snooping, GMRP and static multicast
- Network Partition: supports VLAN, 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, RMON, LLDP, STMP, DHCP
- Network Security: supports SSH, SSL, ACL
- Device Management: supports FTP upgrade
- Device Maintenance: supports port mirroring
- Alarm Output: supports IP/MAC conflicts, power, port and ring alarms
- 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

Protocol

DT-Ring, DT-Ring+, DT-VLAN, MSTP;
 IGMP Snooping, GMRP;
 VLAN, PVLAN;
 Telnet, HTTP, HTTPS, SNMPv1/v2, RMON, LLDP, STMP, DHCP server;
 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: 0.9Mpps
 Switching Delay: < 5μs

Interface

Fast Ethernet Fiber Ports: max 2 100Base-FX SM/MM ports, FC/SC/ST connector
 Fast Ethernet RJ45 Ports: max 6 10/100Base-TX RJ45 ports
 Serial Ports: max 4 RS232/RS485 ports, 20-pin 3.81mm-spacing terminal block
 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: Run1
 Serial Server Running LED: Run2
 Power LED: PWR1, PWR2
 Transmitting and Receiving LEDs of Serial Ports: T1-T4, R1-R4
 Interface LED: Link/ACT, Speed (RJ45 port), Link/ACT (100M fiber ports)

Reset Button

Reboot and load default configuration

Transmission Distance

Serial Cable: RS232: 15m; RS485: 1200m
 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: 12DC (9-18VDC), 24DC (18-36VDC), 48DC (36-72VDC)
 Power Terminal: 5-pin 5.08mm-spacing plug-in terminal block
 Power Consumption: <10W
 Overload Protection: Support
 Reverse Connection Protection: Support
 Redundancy Protection: Support

Physical Characteristics

Housing: Aluminum, fanless
 Protection Class: IP40
 Dimensions (WxHxD): 55.4x139x119.5 mm
 (2.18x5.47x4.70 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

307,699 hrs

Warranty

5 years

Approvals

CE, FCC

Industrial Standard

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

EMS:

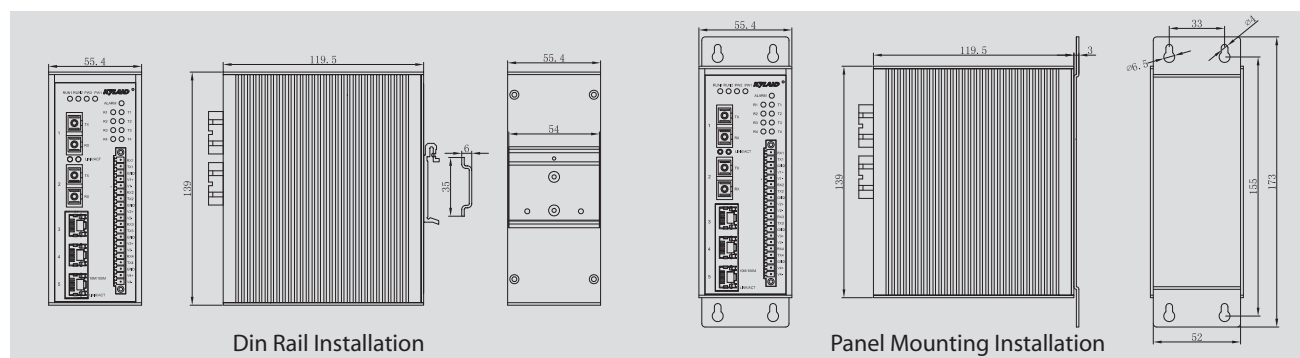
IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
 IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
 IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
 IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
 IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
 IEC61000-4-16 (Common mode conduction): 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**Ordering Information**

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 Ports Distance Connector PS

Ports

2M-3T-4D = 2 100Base-FX multi mode ports, 3 10/100Base-TX RJ45 ports, 4 RS232/485 serial ports

2S-3T-4D = 2 100Base-FX single mode ports, 3 10/100Base-TX RJ45 ports, 4 RS232/485 serial ports

5T-4D = 5 10/100Base-TX RJ45 ports, 4 RS232/485 serial ports

2M-4T = 2 100Base-FX multi mode ports, 4 10/100Base-TX RJ45 ports

2S-4T = 2 100Base-FX single mode ports, 4 10/100Base-TX RJ45 ports

6T = 6 10/100Base-TX RJ45 port

Distance: Fiber Distance

1310-5 = 1310nm, 5km

1310-40 = 1310nm, 40km

1310-60 = 1310nm, 60km

1550-80 = 1550nm, 80km

Connector: Fiber Connector

SC = SC connectors

ST = ST connectors

FC = FC connectors

PS: Power Supply

12DC = 9-18VDC, dual redundant power inputs

24DC = 18-36VDC, dual redundant power inputs

48DC = 36-72VDC, dual redundant power inputs