

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/v3, RMON, LLDP, STP, DHCP
- Network Security: supports DT-Psec, 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

Protocols

DT-Ring, DT-Ring+, DT-VLAN, MSTP;
IGMP Snooping, GMRP;
VLAN, PVLAN;
Telnet, HTTP, HTTPS, SNMPv1/v2/v3, RMON, LLDP, STP, 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: 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: Alarm
Power LED: PWR1, PWR2
Transmitting and Receiving LEDs of Serial Ports: T1-T4, R1-R4
Interface LED: Link/ACT, Speed (RJ45 port)

Button

Reset: System reset
Default: System 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: 12VDC (9-18VDC), 24VDC (18-36VDC), 48VDC (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 (W×H×D): 55.4×139×119.5 mm (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

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)

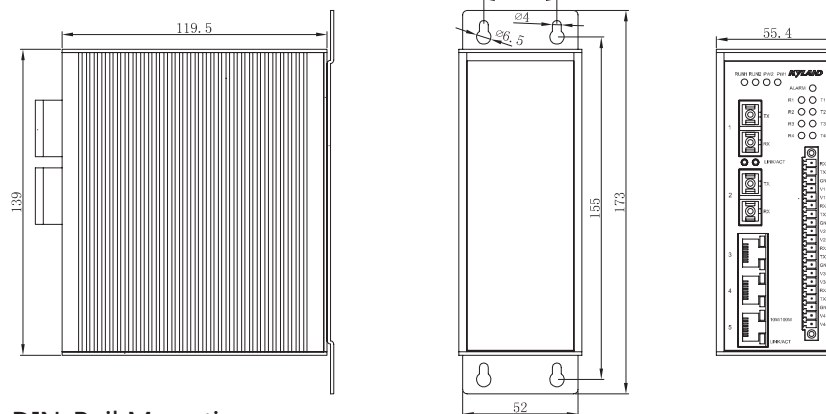
Industry: IEC61000-6-2

Railway: EN50155, EN50121-4

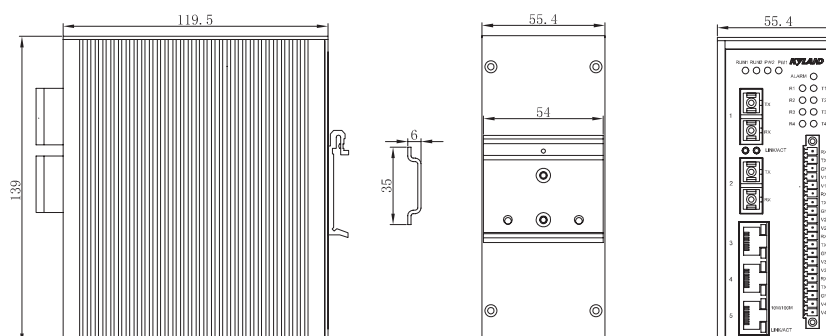
Traffic Control: NEMA TS-2

Mechanical Drawing

Panel Mounting



DIN-Rail Mounting



Ordering Information

Model	Fast Ethernet Port			Serial Port	Fiber Connector			Power Supply		
	100Base-FX Single Mode	100Base-FX Multi Mode	10/100Base-TX		SC	ST	FC	9-18VDC	18-36VDC	36-72VDC
SICOM3005-2S-3T-4D-232/485	2	--	3	4 (RS232/RS485)						
SICOM3005-2M-3T-4D-232/485	--	2	3	4 (RS232/RS485)						
SICOM3005-5T-4D-232/485	--	--	5	4 (RS232/RS485)	--	--	--			
SICOM3005-2S-4T	2	--	4	--						
SICOM3005-2M-4T	--	2	4	--						
SICOM3005-6T	--	--	6	--	--	--	--			

Please Select

Accessories

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

Order Codes

SICOM3005 - - - - - -
FX Connector Distance TX Serial PS

FX: Fiber Ports

2S= 2 100Base-FX single mode fiber ports

2M= 2 100Base-FX multi mode fiber ports

None=No fiber ports

(Please refer to the order information on available port combinations.)

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

3T= 3 10/100Base-T(X) ports, RJ45 connector
4T= 4 10/100BaseT(X) ports, RJ45 connector
5T= 5 10/100BaseT(X) ports, RJ45 connector
6T= 6 10/100BaseT(X) ports, RJ45 connector
(Please refer to the order information on available port combinations.)

Serial: Serial Ports

4D-232/485=4 RS232/485 serial ports
None: No serial ports

PS: Power Supply

12= 12VDC (9-18VDC), dual power inputs
24= 24VDC (18-36VDC), dual power inputs
48= 48VDC (36-72VDC), dual power inputs

Example order codes

SICOM3005-2M-SC-3T-4D-232/485-24
2 100Base-FX multi mode fiber ports, SC connectors, 1310nm 5km, 3 10/100Base-TX RJ45 ports, 4 RS232/485 serial ports, 24VDC(18-36VDC)
power supply, dual power inputs

Note: Please contact sales for different prices.