

**SICOM3005**5 Port Serial Server Function
Integrated Programmable
Industrial Ethernet Switch

CE, FCC, RoHS

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

- Supports 4 serial ports, 2 100M copper/fiber ports and 3 10/100Base-T(X) RJ45 ports
- Embedded serial server has own IP and can be managed through TELNET, WEB, serial port
- Embedded platform, developed under Linux system, supports redevelopment
- Flexible RS232 and RS485 combination, supports plug and play and easy configuration in the software
- Serial port protecting circuit, meet the requirements of anti-interference with industrial level 4
- Supports DT-Ring protocols (Recovery time<50ms), RSTP/STP (IEEE802.1w/d) redundant protocol
- Advanced ring topology protocol avoiding broadcast storm
- Supports IGMP Snooping, port trunking, port mirroring, QoS, VLAN, ACL and link aggregation
- Supports port speed limitation and special broadcast storm control
- Safe MAC and port binding function, static FDB supported
- Bandwidth configuration controls port bandwidth properly
- Improves network monitoring ability through RMON (Group 1, 2, 3 and 9)
- Supports multiple management functions including CLI, TELNET, WEB, SNMP V1/V2/V3 and OPC
- EMC industrial level 4, specially designed for harsh electromagnetic interference environment
- Abundant power supply options, dual redundant DC power inputs
- Relay alarm output for the loss of power
- Ribbed aluminum case for heat dissipation, fanless design
- Operating temperature: -40 to 85°C (-40 to 185°F)
- DIN-Rail or wall mounting installation
- IP40 protection class
- Unified management software for SICOM series: Kyvision3.0

Technical Specifications**Standard**

IEEE802.3
IEEE802.3u
IEEE802.3x
IEEE802.1q
IEEE802.1p
IEEE802.1d
IEEE802.1w
Store and forward switching mode
TCP Server
TCP Client
UDP

Network

Ring, chain, star network topology

Interface

100M Fiber Ports: 2 x 100Base-FX ports, FC/SC/ST
10/100M Copper Ports: 3/4 x 10/100Base-T(X) ports, RJ45 (4, without serial ports)
Serial Ports: 4 x RS232/RS485 serial ports, 20-Pin 3.81mm-spacing terminal block
CONSOLE Interface: RS232, RJ45
Alarm Contact: 3-Pin 3.81mm-spacing terminal block, 250VAC/220VDC Max; 2A Max; 60W Max
LED Indicator: RUN1, RUN2, PWR1, PWR2; LINK/ACT, 10M/100M (1-5); ALARM, TX1-TX4, RX1-RX4 (RS232/485)

Performance

Backplane switching capacity: 5.6G
MAC Address Table Size: 8K

Cable

Serial cable: 15m for RS232, 1200m for RS422/485
Twisted pair: 0-100m (Standard CAT5, CAT5e net cable)
Multi Mode fiber: 1310nm, 0-5km (100Mbps)
Single Mode fiber: 1310nm, 0-40km; 1550nm, 0-80km

Power Requirements

Power input: 12VDC (9V-18VDC), 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs
Power terminal: 5-Pin 5.08mm-spacing plug-in terminal block
Power consumption: <10W

Physical Characteristics

Casing: Ribbed aluminum case (fanless)
Protection class: IP40
Installation: DIN-Rail or wall mounting
Dimensions (WxHxD): 55.4x139x119.5 mm (2.18x5.47x4.70 in.)
Weight: 0.6kg (1.322 pound)

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: 0 to 95% (non-condensing)

Approvals

IEC61000-4-2 (ESD): ±8KV contact discharge, ±15KV air discharge
IEC61000-4-3 (RS): 10V/M (80-1000MHz)
IEC61000-4-4 (EFT): ±4KV power line, ±2KV data line

IEC61000-4-5 (Surge): power line $\pm 4\text{KV CM}/\pm 2\text{KV DM}$, data line $\pm 2\text{KV}$
 IEC61000-4-6 (CS): 3V (10KHZ-150KHZ), 10V (150KHZ-80MHZ)
 IEC61000-4-8 (Power frequency magnetic field): 100A/m cont. 1000A/m, 1s to 3s
 IEC61000-4-12/18 (Damped oscillatory wave): 2.5KV CM, 1KV DM
 IEC61000-4-10 (Damped oscillatory): 30A/m
 IEC61000-4-16 (Common mode conduct): 30V cont. 300V, 1s
 FCC CFR47 Part 15/EN55022: Class A&B
 IEC61000-6-2 (Industrial Standards), IEC61850-3 (Substations),
 IEEE1613 (Electric Power Substations), EN50121-4 (Railway Applications)

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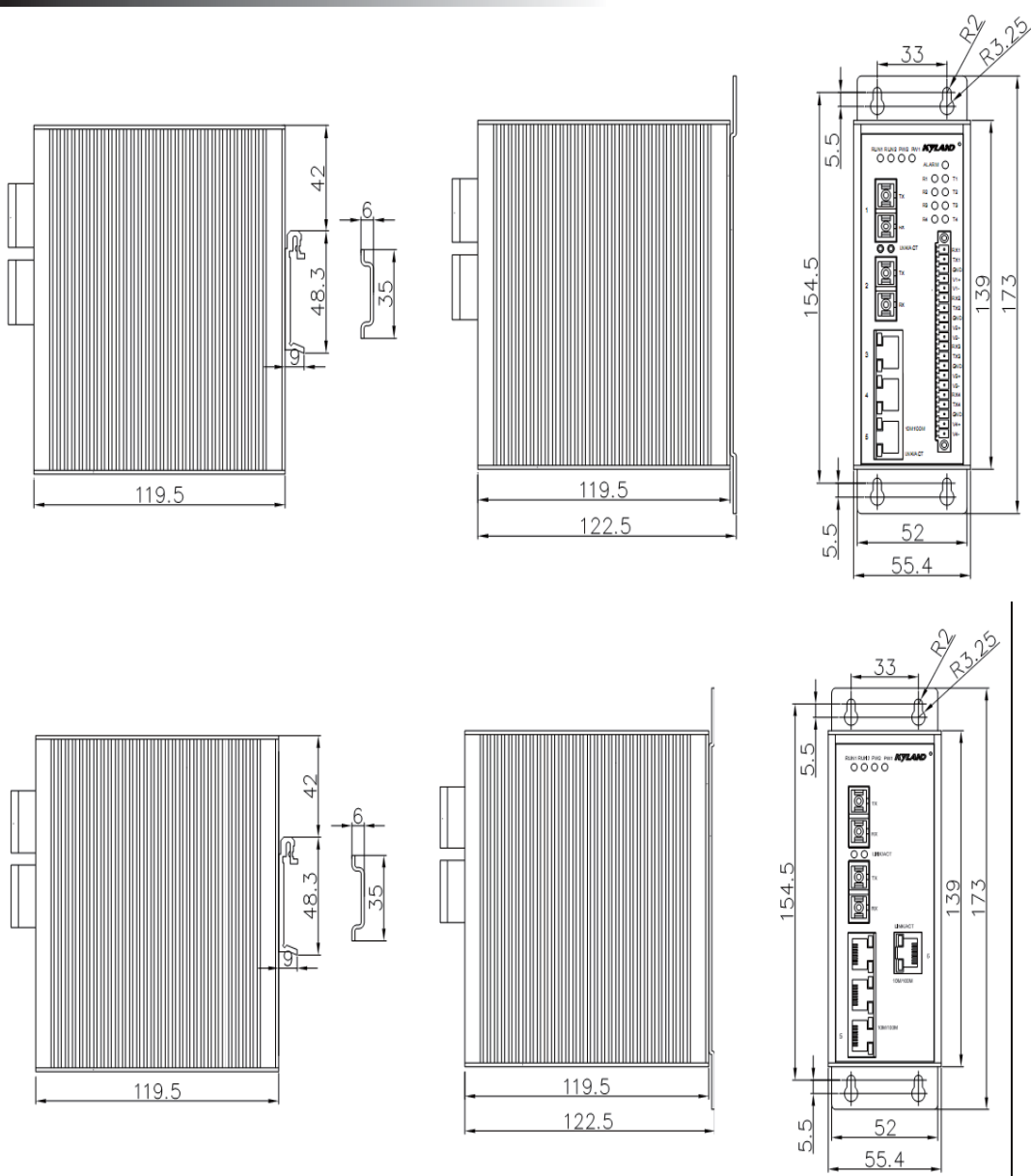
MTBF

35 years

Warranty

5 years

Mechanical Drawing



Ordering Information

Model	Description
SICOM3005-2S-3T-4D-232/485	Serial server integrated managed Ethernet switch with 2 100Base-FX ports, single mode, FC/SC/ST connector, 3 10/100Base-T(X) ports, RJ45 connector and 4 RS232/RS485 serial ports, -40 to 85°C operating temperature
SICOM3005-2M-3T-4D-232/485	Serial server integrated managed Ethernet switch with 2 100Base-FX ports, multi mode, FC/SC/ST connector, 3 10/100Base-T(X) ports, RJ45 connector and 4 RS232/RS485 serial ports, -40 to 85°C operating temperature
SICOM3005-5T-4D-232/485	Serial server integrated managed Ethernet switch with 5 10/100Base-T(X) ports, RJ45 connector and 4 RS232/RS485 serial ports, -40 to 85°C operating temperature
SICOM3005-2S-4T	Managed Ethernet switch with 2 100Base-FX ports, single mode, FC/SC/ST connector, 4 10/100Base-T(X) ports, RJ45 connector, -40 to 85°C operating temperature
SICOM3005-2M-4T	Managed Ethernet switch with 2 100Base-FX ports, multi mode, FC/SC/ST connector, 4 10/100Base-T(X) ports, RJ45 connector, -40 to 85°C operating temperature
SICOM3005-6T	Managed Ethernet switch with 6 10/100Base-T(X) ports, RJ45 connector, -40 to 85°C operating temperature

Power supply: 12VDC, 24VDC, 48VDC, dual redundant power inputs

Order Codes

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

FX: Fiber Ports

2M= 2 multi mode fiber ports

2S= 2 single 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

(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 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.