# SICOM3005

5 Port Serial Server Function Integrated Programmable Industrial Ethernet Switch

Version: 101216



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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 antiinterference 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
- Safe MAC and port binding function, static FDB supported
- Bandwidth configuration controls port bandwidth properly
- $\bullet$  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: Kyvision 3.0

# **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  $\pm 4$ KV CM/  $\pm 2$ KV DM, data line  $\pm 2$ 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)

CE, FCC, ROHS

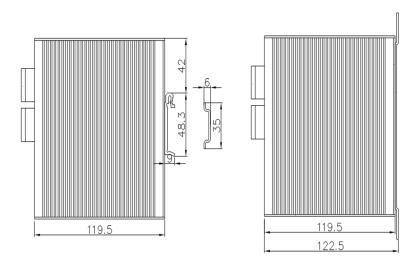
#### **MTBF**

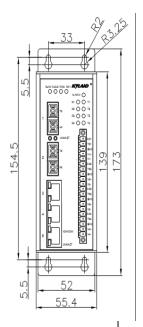
35 years

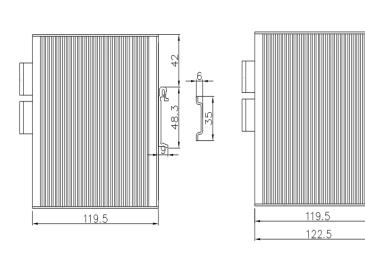
#### Warranty

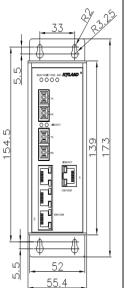
5 years

### **Mechanical Drawing**









5 Port Serial Server Function Integrated Programmable Industrial Ethernet Switch

# **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