SICOM3000BA

6+3G Port Gigabit Managed Industrial Ethernet Switch

Version: 101216

SICOM3000BA

6+3G Port Gigabit Intrinsically Safe Low Power Consumption Managed Industrial Ethernet Switch

CE, FCC, UL, RoHS, Mine Safety Certification

Overview

The SICOM3000BA series, intrinsically safe low power consumption Gigabit managed DIN-Rail industrial Ethernet switch, was developed by Kyland for industrial information layers in transport, power and mining applications. It offers 3 Gigabit SFP slots 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 5.4W, 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

- Supports 3 Gigabit SFP slots and 6 10/100Base-T(X) RJ45 ports
- Approved by mining safety certification, low power consumption, less than 5.4W under full load
- Supports DT-Ring protocols (Recovery time<50ms), RSTP/STP (IEEE802.1w/d) redundant protocol
- Flexible network topologies: ring, chain, star and tangent ring
- Advanced ring topology protocol avoiding broadcast storm
- Supports IGMP Snooping, port mirroring, QoS, VLAN 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
- 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
- Various power supply options, dual redundant DC power inputs
- Relay alarm output for power supply failure
- Provides alarm input port, AC or DC power supply information can be displayed in the management interface
- Operating temperature: -40 to 85°C (-40 to 185°F)
- Ribbed aluminum case for heat dissipation, fanless design
- DIN-Rail mounting and wall mounting
- IP40 protection
- Unified management software for SICOM series: Kyvision3.0

Technical Specifications

Standard

IEEE802.3
IEEE802.3u
IEEE802.3x
IEEE802.3z
IEEE802.1ab
IEEE802.1d
IEEE802.1w
IEEE802.1p
IEEE802.1q
Store and forward switching mode

Network

Ring, chain, star and tangent ring network topology

Interface

Gigabit Ethernet Ports: 3 x Gigabit SFP slots for 1000Base-SX/LX/LH/ZX, LC or 10/100/1000Base-T(X), RJ45 interface modules
Fast Ethernet Ports: 6 x 10/100Base-T(X) ports, RJ45
CONSOLE Interface: RS232, RJ45
Alarm Output Port: 2-Pin 3.81mm-spacing terminal block (24VDC, 48VDC), 6-Pin 5.08mm-spacing terminal block (3.3VDC), 250VAC/350VDC Max; 120mA Max
Alarm Input Port: 6-Pin 5.08mm-spacing terminal block; When pin2 input high-level voltage, the system is under AC power supply; When pin2 input low-level voltage , the system is under DC power supply (3.3VDC)
LED Indicator: RUN1, RUN2, PWR1, PWR2; LINK/ACT (G7-G9); LINK/ACT, 10M/100M (1-6)

Performance

Backplane switching capacity: 9.6G
MAC Address Table Size: 8K

Cable

Twisted Pair: 0-100m
Multi Mode Fiber: 1310nm 0-2km (1000Mbps)
Single Mode Fiber: 1310nm, 0-40km; 1550nm, 0-80km

Power Requirements

Power Input: 3.3VDC (3.14-3.47VDC), 24VDC (18-36VDC), 48VDC (36-72VDC), dual redundant power inputs
Power Terminal: 6-Pin 5.08mm-spacing plug-in terminal block (3.3VDC); 3-Pin 3.81mm-spacing plug-in terminal block (24VDC, 48VDC)
Power Consumption: <5.4W

Physical Characteristics

Casing: Ribbed aluminum case (fanless
Protection class: IP40
Installation: DIN-Rail or wall mounting
Dimensions (WxHxD):
75x140x123 mm (2.95x5.51x4.84 in) (24VDC, 48VDC);
150x61.5x110mm (5.91x2.42x4.33 in) (3.3VDC)
Weight: 1kg (2.205 pound) (24VDC, 48VDC),
0.6kg (1.323 pound) (3.3VDC)

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): Power line±4KV, data line±2KV
IEC61000-4-5 (Surge): Power line ±4KV CM,±2KV DM, Data line ±2KV
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): 20V 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, UL, ROHS, Mine Safety Certification

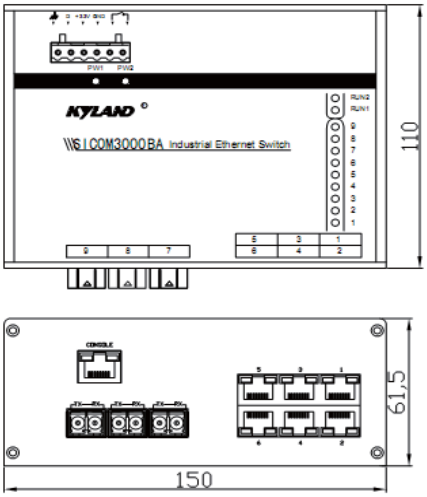
MTBF

35 years

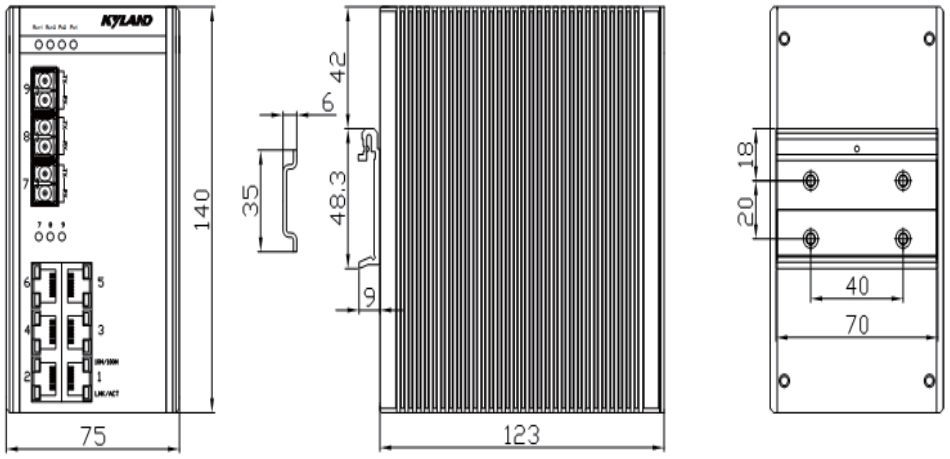
Warranty

5 years

Mechanical Drawing



3.3VDC



24VDC/48VDC

Ordering Information

Model	Description
SICOM3000BA-3GX-6TX	Managed Gigabit Ethernet switch with 3 Gigabit SFP slots, 6 10/100Base-T(X) ports, RJ45 connector, DIN-Rail or wall mounting 3.3VDC (150x61.5x110mm), 24VDC, 48VDC (75x140x123mm), dual redundant power inputs, -40 to 85°C operating temperature

Power supply: 3.3VDC, 24VDC, 48VDC, dual redundant power inputs

SFP Modules

SM-GSFP-TX/RJ45: SFP module with 1 x 10/100/1000M port, RJ45, 100m
SM-GSFP-SX/LC-550: SFP module with 1 x 1000M multimode port, LC, 850nm, 550m
SM-GSFP-LX/LC-550: SFP module with 1 x 1000M multimode port, LC, 1310nm, 550m
SM-GSFP-LX/LC-10: SFP module with 1 x 1000M single mode port, LC, 1310nm, 10km
SM-GSFP-LX/LC-15: SFP module with 1 x 1000M single mode port, LC, 1310nm, 15km
SM-GSFP-LH/LC-40: SFP module with 1 x 1000M single mode port, LC, 1310nm, 40km
SM-GSFP-ZX/LC-40: SFP module with 1 x 1000M single mode port, LC, 1550nm, 40km
SM-GSFP-ZX/LC-60: SFP module with 1 x 1000M single mode port, LC, 1550nm, 60km
SM-GSFP-ZX/LC-80: SFP module with 1 x 1000M single mode port, LC, 1550nm, 80km

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