SICOM8010-M12

8+2G Ports IP67 M12 Managed POE Industrial Ethernet Switch

CE, FCC, RoHS, EN50155

Overview

The SICOM8010 series IP67 M12 managed POE industrial Ethernet switches are designed for industrial applications in harsh environments. The M12 connectors ensure tight, robust connections, and guarantee reliable operation, even for applications that are subject to high vibration and shock. The SICOM8010 series Ethernet switches provide 8 fast Ethernet M12 ports with 8 IEEE 802.3af compliant PoE (Power-over-Ethernet) ports and 2 Gigabit copper uplink ports. The switches are classified as power source equipment (PSE) and provide both standard IEEE802.3af 48VDC PoE with up to 15.4 watts of power per port and 24VDC PoE with up to 25 watts of power per port.

The SICOM8010 switches can be used to power IEEE 802.3af compliant powered devices (PDs), eliminating the need for additional wiring. The switches support IP67 protection class with an operating temperature range of -40 to 85°C. The SICOM8010 switches are compliant with FCC CFR47 Part 15 and EN55022 Class A&B, making them suitable for a variety of industrial applications.

As one member of Kyland SICOM series, it supports DT-Ring protocol and Kyvision management software. And the centralized management function is also optional.

Features

1. 2 10/100/1000Base-T(X) ports with M12 connectors
2. 8 10/100Base-T(X) M12 ports with POE function (optional)
3. Supports POE function complied with IEEE802.3af. The input voltage range of POE is 22VDC-57VDC. The max power consumption of powered device (PD) is up to 25 watts.
4. Supports DT-Ring protocols (recovery time<50ms), RSTP/STP redundant ring protocols
5. Flexible network topologies such as Ring, Chain, Star and Tangent Ring
6. Advanced ring topology protocol avoiding broadcast storm
7. Supports IGMP Snooping, port mirroring, QoS, VLAN, ACL and link aggregation
8. Supports SSH/SSL to improve network security
9. Supports port speed limitation and special broadcast storm control
10. Safe MAC and port binding function, static FDB supported
11. Bandwidth configuration controls port bandwidth properly
12. Improves network monitoring ability through RMON (Group 1, 2, 3 and 9)
13. Supports multiple management functions including CLI, TELNET, WEB, SNMP V1/V2/V3 and OPC
14. EMC industrial level 4, specially designed for harsh electro-magnetic interference environment
15. Abundant power supply options, dual redundant power supplies
16. Relay alarm output for the loss of power
17. Managed and unmanaged product are both available
18. Operating temperature: -40 to 85°C(-40 to 185°F)
19. Ribbed aluminum case for heat dissipation (patent), fanless design
20. Wall mounting
21. IP67 protection class
22. Uniform network management software for SICOM series: Kyvision3.0

Technical Specifications

Standard

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

Network

Chain, star and ring network topology

Performance

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

Interface

Gigabit Ethernet Ports: 2 x 10/100/1000Base-T(X) ports with M12 connectors
Fast Ethernet Ports: 8 x 10/100Base-T(X) ports with M12 connectors and POE function (optional)
CONSOLE Interface: RS232, M12
Alarm Contact: 250VAC/220VDC Max; 2A Max; 60W, Max, M12
LED Indicators: RUN, ALARM, PWR1, PWR2; LINK, ACT (G1-G2); POE, LINK/ACT (1-8)

Cable

Twisted Pair: 0-100m (Standard CAT5 and CAT5e network cable)

Power Requirements

Power input: 22VDC~57VDC (24VDC, 48VDC) with POE input; 18VDC~72VDC without POE input
Input interface: M16
Power consumption: <12W (no PD), Max 220W
PSE output voltage: 22VDC~57VDC (24VDC, 48VDC)
PSE output current: >550mA/port
Power consumption of PD (Powered Device): >25W (related to the input voltage)

Physical Characteristics
Casing: Aluminum case (fanless)
Protection class: IP67
Installation: Wall mounting
Dimensions (WxHxD): 130x279x55mm (5.12x10.98x2.17 in.)
(The depth is 68.5mm including the terminal)
Weight: 1.8kg (3.968 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)

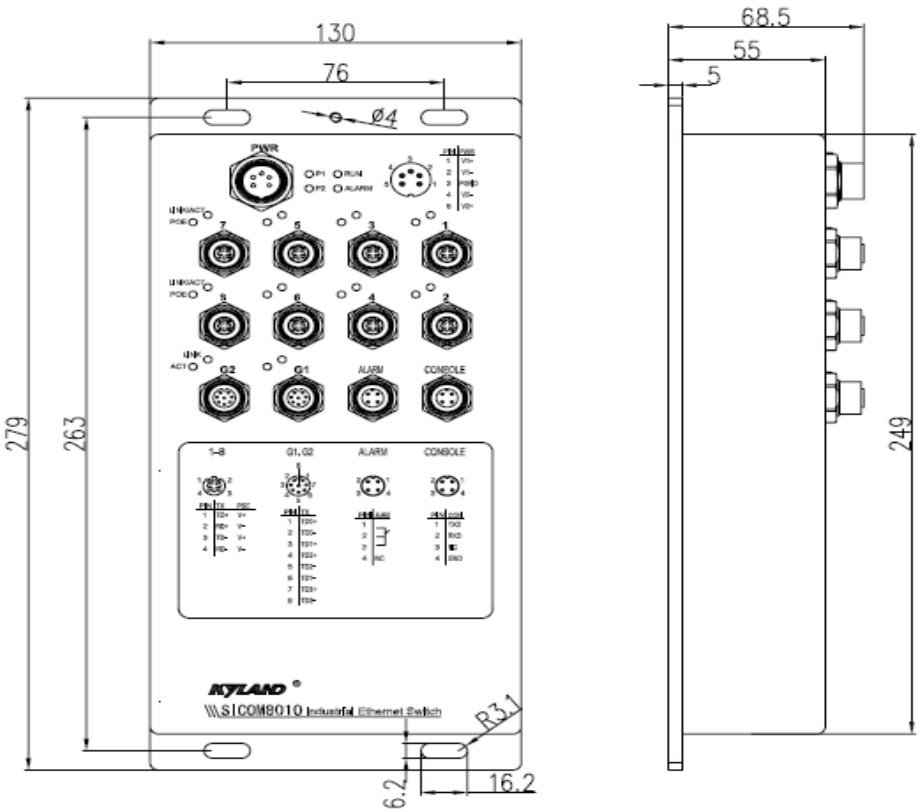
Approvals
IEC61000-4-2 (ESD): ±8KV contact discharge, ±15KV air discharge
IEC61000-4-3 (RS): 10V/M (80-1000MHz)
IEC61000-4-4 (EFT): power line ±4KV, data line ±2KV
IEC61000-4-5 (Surge): power line ±4KV CM/ ±2KV DM, data line ±2KV
IEC61000-4-6 (CS): 3V (10KHZ-150KHZ),10V (150KHz-80MHz)
IEC61000-4-8 (Power 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): 30V cont. 300V, 1s
FCC CFR47 Part 15/EN55022: Class A & B
IEC61000-6-2 (Industrial Standards), IEC61850-3 (Substations), IEEE1613 (Electric Power Substations), EN50155, EN50121-4 (Railway Applications)
IEC61373 (Anti vibration and shock)

CE, FCC, RoHS, EN50155

MTBF
35 years

Warranty
5 years

Mechanical Drawing



Ordering Information

Model	Description
SICOM8010-8T-M12	IP67 managed Ethernet switch with 8 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-8T-M12-UM	IP67 unmanaged Ethernet switch with 8 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-8T-4P-M12	IP67 managed Ethernet switch with 4 10/100Base-T(X) POE M12 copper ports, 4 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-8T-4P-M12-UM	IP67 unmanaged Ethernet switch with 4 10/100Base-T(X) POE M12 copper ports, 4 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-8T-8P-M12	IP67 managed Ethernet switch with 8 10/100Base-T(X) POE M12 copper ports, -40 to 85°C operating temperature
SICOM8010-8T-8P-M12-UM	IP67 unmanaged Ethernet switch with 8 10/100Base-T(X) POE M12 copper ports, -40 to 85°C operating temperature
SICOM8010-2GE-8T-M12	IP67 managed Ethernet switch with 2 10/100/1000Base-T(X) M12 copper ports, 8 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-2GE-8T-M12-UM	IP67 unmanaged Ethernet switch with 2 10/100/1000Base-T(X) M12 copper ports, 8 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-2GE-8T-4P-M12	IP67 managed Ethernet switch with 2 10/100/1000Base-T(X) M12 copper ports, 4 10/100Base-T(X) POE M12 copper ports, 4 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-2GE-8T-4P-M12-UM	IP67 unmanaged Ethernet siwtch with 2 10/100/1000Base-T(X) M12 copper ports, 4 10/100Base-T(X) POE M12 copper ports, 4 10/100Base-T(X) M12 copper ports, -40 to 85°C operating temperature
SICOM8010-2GE-8T-8P-M12	IP67 managed Ethernet switch with 2 10/100/1000Base-T(X) M12 copper ports, 8 10/100Base-T(X) POE M12 copper ports, -40 to 85°C operating temperature
SICOM8010-2GE-8T-8P-M12-UM	IP67 unmanaged Ethernet switch with 2 10/100/1000Base-T(X) M12 copper ports, 8 10/100Base-T(X) POE M12 copper ports, -40 to 85°C operating temperature

Power supply: 24VDC, 48VDC, dual redundant power supplies

Accessories

Connector	Port
M12- 4 Pin-99-3729-810-04	10/100Base-T(X) ports
M12-4 Pin-99-1430-812-04	CONSOLE Interface, Alarm Port
M16-99-5614-15-05 M16-99-5114-40-05	Power Port
M12-8 Pin-99-0487-12-08	10/100/1000Base-T(X) ports

Please visit our website: www.kyland.cn for the latest updates.