SICOM6000

24+4G Port Layer 3 Managed Din-rail Modular Backbone Switches

- Supports max 4 gigabit combo ports and 24 fast Ethernet fiber/copper ports
- Modular design for easy expansion
- Embedded serial data server, and supports max 12 RS232/RS485 ports
- Supports DT-Ring , RSTP/MSTP and VRRP for network redundancy
- Supports IGMP, IGMP snooping, PIM-SM, PIM-DM
- Supports Layer 3 routing protocols such as RIP, OSPF
- IP40 protection class

>> Overview

SICOM6000 is modular layer 3 managed industrial Ethernet switch for Din Rail installation. It offers 4 combo Gigabit SFP slots or 10/100/1000Base-T(X) ports, 24 100M copper/fiber ports or 12 RS232/RS485 serial ports. SICOM6000 also comes with EMC industrial level 4 design and complies with IP40 protection class. SICOM6000 offers hardware wire-speed layer 3 switching, and supports many Layer 2 software features such as port, VLAN, multicast, QoS, fast redundant ring. It supports Console, Telnet, Web management and network management software based on SNMP. SICOM6000 can provide solutions with high performance and high reliability for the industrial communication systems.

>> Software Functions

Switching Function

Supports VLAN
Supports GVRP
Supports port aggregation
Supports flow control
Support port rate limit

Redundancy Protocol

Supports VRRP
Supports DT-Ring, DT-Ring+, and DT-VLAN and the recovery time<50 ms
Supports RSTP/MSTP and compatible with STP

Multicast Protocol

Supports IGMP v1/v2
Supports IGMP snooping
Supports static multicast

Supports PIM-SM, PIM-DM

Routing Protocol

Supports RIPv1/v2
Supports OSFPv2
Supports static routing

Service Quality Management

Supports ACL
Supports SP and WRR queuing

Management & Maintenance

Supports Console, Telnet, and Web management methods
Supports SNMPv1/v2c, Kyvision centralized management.
Supports file transfer and software update over FTP and TFTP
Supports the power failure alarm, power alarm, port alarm, and ring alarm
Supports port mirroring
Supports Syslog
Supports LLDP
Supports RTC

IP Address Management

Supports Bootp
Supports DHCP server/relay/client

>> Product Specifications

Technical Specifications

Standard
▼ IEEE 802.3i (10Base-T)
▼ IEEE 802.3u (100Base-TX and 100base-FX)

- ▼ IEEE 802.3ab (1000Base-T)
- ▼ IEEE 802.3ad (port aggregation)
- ▼ IEEE 802.3z (1000Base-SX/LX)
- ▼ IEEE 802.3x (flow control)
- ▼ IEEE 802.1p (Class of Service)
- ▼ IEEE 802.1Q (VLAN)
- ▼ IEEE 802.1w (RSTP)
- ▼ IEEE 802.1s (MSTP)

Switch Properties

Priority queue	8
Number of VLANs	4K
VLAN ID	1–4093
Number of multicast groups	256
Routing table	30K
MAC table	16K
Packet buffer	512 Mbit
Packet forwarding rate	9.5 Mpps
Switching delay	< 10 µs

Interface

Gigabit ports
- ▼ 1000Base-X, SFP port
- ▼ 10/100/1000Base-T(X), RJ45 port

Fast Ethernet ports
- ▼ 100Base-FX, SFP port, LC connector
- ▼ 10/100Base-T(X), RJ45 port

Serial port	RS232/RS485,20-pin 3.81mm-spacing plug-in terminal block
Console port	RS232,RJ45
Alarm contact	3-pin 3.81mm-spacing plug-in terminal block, 250 VAC/220 VDC Max, 2 A Max, 60 W Max
Number of slots	6

LED

LED on front panel
- ▼ Running LED: Run
- ▼ Alarm LED: Alarm
- ▼ Power LED: POW, POW1, POW2
- ▼ Module status LED: L1 to L4
- ▼ Port LED: LINK
- ▼ Serial port LED:1T-4T,1R-4R

LED on rear panel
- ▼ Port LED: LINK/ACT
- ▼ Port speed LED: Speed

Power Requirements

Power input
- ▼ 24VDC(18-36VDC)
- ▼ 48VDC(36-72VDC)

Power terminal	5-pin 5.08 mm-spacing plug-in terminal block
Power consumption	<35W
Overload protection	Support
Reverse connection protection	Support
Redundancy protection	Support

Physical Characteristics

Housing	Metal
Cooling	Natural cooling, fanless
Protection Class	IP40
Dimensions(WxHxD)	320mm×165.5mm×236mm (12.60×6.52×9.29 in.)
Weight	<7Kg (15.432 pound)
Mounting	Din-rail or panel mounting

Environmental Limits

Operating temperature	-40°C to +85°C (-40°F to 185°F)
Storage temperature	-40°C to +85°C (-40°F to 185°F)
Ambient Relative Humidity	5% - 95% (non-condensing)

Quality Assurance

MTBF	251,487 hrs
Warranty	5 years

Approvals

For the latest dynamics of the product, visit the website of Kyland.

Industry standard
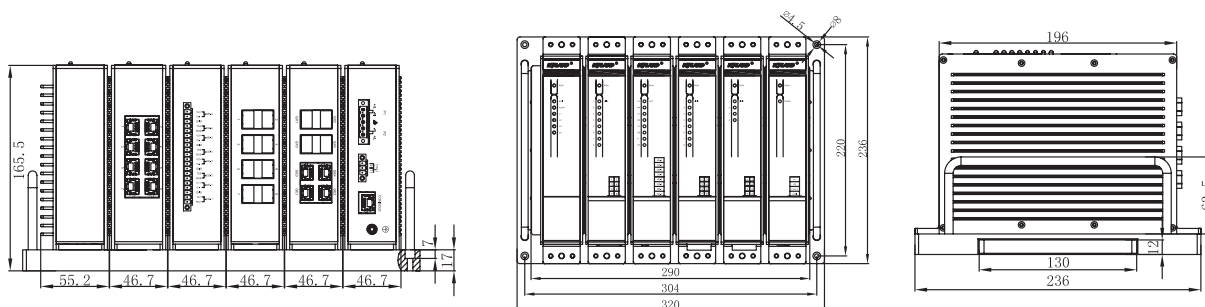
EMI
- ▼ FCC CFR47 Part 15,EN55022/CISPR22,Class A

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)

≫ Mechanical Drawing

Ordering Information

Chasis	
SICOM6000-MB	SICOM6000 Chassis
Power Supply Module	
SM6.1-Power-L1	48VDC(36-72VDC), dual redundant power inputs
SM6.1-Power-L3	24VDC(18-36VDC), dual redundant power inputs
Interface Module	
SM6.1-4G	4x1000Base-X, 10/100/1000Base-T(X) Combo port
SM6.1-8T	8x10/100Base-T(X) RJ45 port
SM6.1-8SFP	8x100Base-FX, SFP port
SM6.1-4D	4xRS232/RS485 Serial port

Accessories

Accessory Model	Description
Gigabit SFP module	Please refer to Gigabit SFP module ordering table
100M SFP module	Please refer to 100M SFP module ordering table
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port