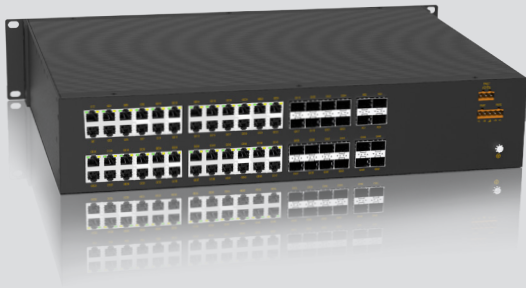# SICOM6448G

48G+4 10G port Layer 3 Managed Backbone Rack Mountable Ethernet Switches

- Supports Gigabit fiber/copper combo ports and maximum 4 10G ports, 48 Gigabit copper ports or 16 Gigabit copper ports + 32 Gigabit fiber ports
- Supports DT-Ring, RSTP/MSTP and VRRP redundancy protocols
- Supports static routing, RIP v1/v2, OSPF v2 dynamic routing protocols
- Supports QoS, VLAN, SNMP v1/v2c/v3, RMON (Group 1,2,3 and 9)
- Supports fiber power test function

Overview

The SICOM6448G switches are specially developed as the Layer 3 backbone solutions for industrial communication applications. They are 2U 19 inch rack mountable switches supports maximum 4 10G ports, 48 Gigabit copper ports, 32 Gigabit fiber ports. SICOM6448G switches support abundant layer 2 features like VLAN, Multicast, QoS, fast recovery redundancy, and also layer 3 features including static routing, RIP, OSPF. They support management through Console, Telnet, Web, and network management software based on SNMP. The SICOM6448G switches can be widely deployed in the backbone communication systems within all kinds of industries.

Software functions

Switching Function

Supports VLAN, PVLAN
Supports GVRP (pending)
Supports port trunking
Supports LACP (pending)
Supports port flow control
Supports speed limit, broadcast storm control

Redundancy Protocol

Supports VRRP
Supports DT-Ring, DT-Ring+, DT-VLAN with the recovery time<50ms
Supports DRP/DHP with the recovery time<20ms
Supports RSTP/MSTP

Multicast Protocol

Supports IGMP-snooping
Supports GMRP
Supports static multicast

Routing

Supports OSPFv2
Supports static routing
Supports IGMP (pending)
Supports PIM-SM, PIM-DM(pending)

Network Security

Supports IEEE 802.1x
Supports HTTPs/SSL, SFTP Client(pending)
Supports SSH
Supports RADIUS
Supports TACACA+ (pending)
Supports user classification

Service Quality Management

Supports ACL
Supports 802.1p and TOS/DiffServ
Supports SP,WRR queue scheduling

Management & Maintenance

Supports Console,Telnet,WEB management methods
Supports SNMPv1/v2c/v3,Kyvison centralized management
Supports software upgrade by FTP/TFTP
Supports RMON(pending)
Supports IP/MAC conflict alarm, power failure alarm, port alarm and ring alarm
Supports port mirroring
Supports Syslog
Supports LLDP

IP Address Management

Supports DHCP server/client/server option 82

Clock Management

Supports SNTP Client

Product Specifications

Technical Specifications

Standards
- IEEE 802.3i(10Base-T)
- IEEE 802.3u(100Base-TX)
- IEEE 802.3ab(1000Base-T)
- IEEE 802.3z(1000Base-SX/LX)
- IEEE 802.3ad(port trunking)
- IEEE 802.3x(Flow control)
- IEEE 802.1p(Class of Service)
- IEEE 802.1Q(VLAN)
- IEEE 802.1w(RSTP)
- IEEE 802.1s(MSTP)
- IEEE 802.1X

Switch Properties

Priority Queues	8
Number of VLANs	4k
VLAN ID	1–4093
Number of Multicast Groups	256(L2 multicast groups)
Routing Table	3.9K
MAC Table	16K
Packet Forwarding Rate	130.9Mpps

Interface Slots

10G port   10GBase-X, SFP+ interface

Gigabit Port
- 1000Base-X, SFP ports
- 10/100/1000Base-T(X), RJ45 ports
- Console Port: RS232, RJ45 port

Alarm Terminal Blocks
- 3 pin 5.08mm spacing plugin terminal, 250VAC/220VDC Max, 2A Max, 10A@1s, 60W Max

LED

LED on front panel
- Running LED: Run
- Alarm LED: Alarm
- Power LED: PWR1, PWR2
- Interface LED: Link/ACT

Power Requirements

Power Input
- 220AC/DC(85-264VAC/120-300VDC)

Power Terminal	5-pin 5.08 mm-spacing
Power Consumption	< 80W
Overload Protection	Support
Reverse Connection Protection	Support
Redundancy Protection	Support

Physical Characteristics

Housing	Metal
Cooling	Nature cooling, fanless
Protection Class	IP30
Dimensions	483mm×88mm×325mm
Weight	<11kg
Mounting	2U rack mountable

Environmental Limits

Operating Temperature	-10℃ to +60℃
Storage Temperature	-40℃ to +85℃
Ambient Relative Humidity	5 ~ 95% (non-condensing)

Quality Assurance

|	
MTBF	300000 hrs
Warranty	5 years

Industry Standard

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

EMS
- IEC61000-4-2 (ESD) ±6kV (contact), ±8kV (air)
- IEC61000-4-3 (RS) 20V/m (80MHz-2GHz)
- IEC61000-4-4 (EFT) Power Port: ±2kV; Data Port: ±2kV
- IEC61000-4-5 (Surge) Power Port: ±1kV/DM, ±2kV/CM
- IEC61000-4-6 (CS) 10V (150kHz-80MHz)
- IEC61000-4-8(Power frequency magnetic field)50Hz 100A/m
- IEC61000-4-9(Pulsed magnetic field)300A/m
- IEC61000-4-29 (Voltage Short interruptions) 10ms 100%

Safety
- EN60950-1

Machinery
- IEC61373 (Vibration and Shock)
- IEC60068-2-32 (Free Fall)

Mechanical Drawing
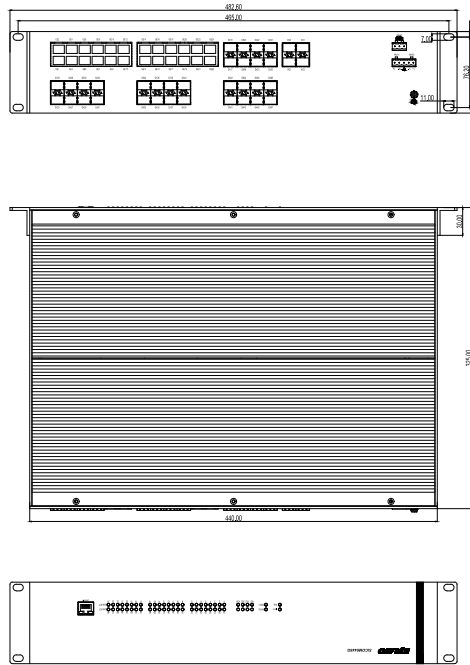
Product Specifications

Panel Mounting	SICOM6448G-Ports-PS1-PS2
Port	
4X20G28GE	4x10GBase-X SFP+ ports, 20x1000Base-X, 10/100/1000Base-T(X) Combo ports, 28x10/100/1000Base-T(X) ports
4X8G24GX16GE	4x10GBase-X SFP+ ports, 8x1000Base-X, 10/100/1000Base-T(X) Combo ports, 24x1000Base-X SFP ports, 16x10/100/1000Base-T(X) ports
20G28GE	20x1000Base-X, 10/100/1000Base-T(X) Combo ports, 28x10/100/1000Base-T(X) ports
8G24GX16GE	8x1000Base-X, 10/100/1000Base-T(X) Combo ports, 24x1000Base-X SFP ports, 16x10/100/1000Base-T(X) ports
PS1-PS2	
HV-HV	220AC/DCW(85-264VAC/77-300VDC), redundant power supplies

Accessories

Accessory Model	Description
Gigabit SFP module	Please refer to the Gigabit SFP module selection list
10G SFP+ module	Please refer to the 10G SFP module selection list
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port