

SICOM6448G

48G+4*10G port layer 3 managed rack mountable switches



» Overview

SICOM6448G is a layer 3 managed industrial Ethernet switch designed to operate reliably in electrically harsh and climatically demanding industrial environments. SICOM6448G supports up to four 10 gigabit ports, 48 gigabit RJ45 ports or 16 gigabit RJ45 ports and 32 gigabit SFP ports. SICOM6448G is a 19-inch rack mountable device and its combo ports design offers the maximum flexibility for easy expansion. SICOM6448G supports many Layer 2 software features such as port, VLAN, multicast, QoS, fast redundant ring and Layer 3 functions such as RIP, OSPF, PIM-SM, PIM-DM. It supports Console, Telnet, Web management and network management software based on SNMP. At present, the product is widely used at the backbone networks in many industrial communication systems.

» Key Features

- Supports combo gigabit ports with option of 1000 Base-T(X) RJ45 or 1000 Base-X Fiber
- Support Max four 10 gigabit ports, 48 gigabit RJ45 ports or 16 gigabit RJ45 ports and 32 gigabit SFP ports
- Supports DT-Ring ,STP/RSTP/MSTP and VRRP for network redundancy
- Supports Layer 3 Static routing and routing protocols such as RIP v1/v2 and OSPF
- Supports Qos,VLAN, SNMP v1/v2/v3, RMON(1,2,3,9 Group)
- Supports SFP Digital Diagnostics Monitoring
- IP40 protection class

» Product Specifications

>Software functions

-Switching function

Supports VLAN , PVLAN

Supports port aggregation

Supports flow control

Supports broadcast storm suppression

Supports port rate limit

-Redundancy protocol

Supports VRRP

Supports DT-Ring, DT-Ring+, and DT-VLAN and the recovery time<50 ms

Supports DRP/DHP with recovery time<20 ms

Supports RSTP/MSTP and compatible with STP

-Multicast protocol

Supports Static multicast

Supports GMRP

Supports IGMP snooping

Supports PIM SM(pending) and PIM DM(pending)

-Routing protocol

Supports RIPv1/v2

Supports OSPFv2

Supports static routing

Supports IGMP

-Security

Supports IEEE 802.1x

Supports HTTPS/SSL,SFTP Client

Supports SSH

Supports RADIUS

Supports user classification

-Service quality management

Supports ACL

Supports 802.1p and TOS/DiffServ, SP and WRR queuing

-Management and maintenance

Supports Console, Telnet, and Web management methods

Supports SNMPv1/v2c/v3 and can managed by Kyvision

Supports file transfer and software update over FTP and TFTP

Supports RMON

Supports the IP/MAC address conflict alarm, power failure alarm, port alarm, and ring alarm

Supports port mirroring

Supports Syslog

Supports LLDP

Supports DDM

-IP address management

Supports DHCP Server/Client/Server option 82

-Clock management

Supports SNTP Client

>Technical specifications

-Standard

IEEE 802.3i(10Base-T)

IEEE 802.3u(100Base-TX and 100Base-FX)

IEEE 802.3ab(1000Base-T)

IEEE 802.3z(1000Base-SX/LX)

IEEE 802.3ae(10GBase-X)

IEEE 802.3ad (port aggregation)

IEEE 802.3x (flow control)

IEEE 802.1p (priority)

IEEE 802.1Q(VLAN)

IEEE 802.1w(RSTP)

IEEE 802.1s(MSTP)

IEEE 802.1x

-Switch properties

Priority queue: 8

Number of VLANs: 4K

VLAN ID: 1–4093

Number of multicast groups: 256

Routing table: 3.9K

MAC table: 16K

Packet Buffer: 12Mbit

Packet forwarding rate: 130.9 Mpps

-Interface

10 Gigabit ports: 10GBase-X, SFP+ port

Gigabit ports: 1000Base-X, SFP port

10/100/1000Base-T(X): RJ45 port

Console port: RS232,RJ45

Alarm: 3-pin 5.08mm-spacing plug-in terminal block, 250 VAC/220 VDC Max, 2A Max, 10A@1s, 60W Max

-LED

Alarm LED: Alarm

Running LED: Run

Power LED: PWR1, PWR2

Port LED: Link/ACT

-Power Requirements

Power input 100-240VAC,50/60Hz;110-220VDC (85-264VAC/77-300VDC)

Power terminal 5-pin 5.08 mm-spacing plug-in terminal block

Power consumption <72W

Overload protection Support

Reverse connection protection Support

Redundancy protection Support

-Physical Characteristics

Housing: Metal

Cooling: Natural cooling, fanless

Protection Class: IP40

Dimensions(W×H×D): 483 mm × 88mm × 325mm

Weight: 10.5 Kg

Mounting: 19 inch rack mounting

-Environmental limits

Operating temperature: -40°C to +75°C

Storage temperature: -40°C to +85°C

Ambient Relative Humidity: 5% to 95% (non-condensing)

-Quality assurance

MTBF: 460670h

Warranty: 5 years

-Approvals

CE,FCC

EN 50121

IEC 62368-1, EN 62368-1

-Industry standard

EMI

FCC CFR47 Part 15,EN55032/CISPR22,Class A

EMS

IEC61000-4-2(ESD) $\pm 6\text{kV}$ (contact), $\pm 8\text{kV}$ (air)

IEC61000-4-3(RS) 10V/m(80MHz-2GHz)

IEC61000-4-4(EFT) Power Port: $\pm 2\text{kV}$;Data Port: $\pm 1\text{kV}$

IEC61000-4-5(Surge) Power Port: $\pm 2\text{kV}/\text{DM}$, $\pm 1\text{kV}/\text{CM}$;Data Port: $\pm 2\text{kV}$

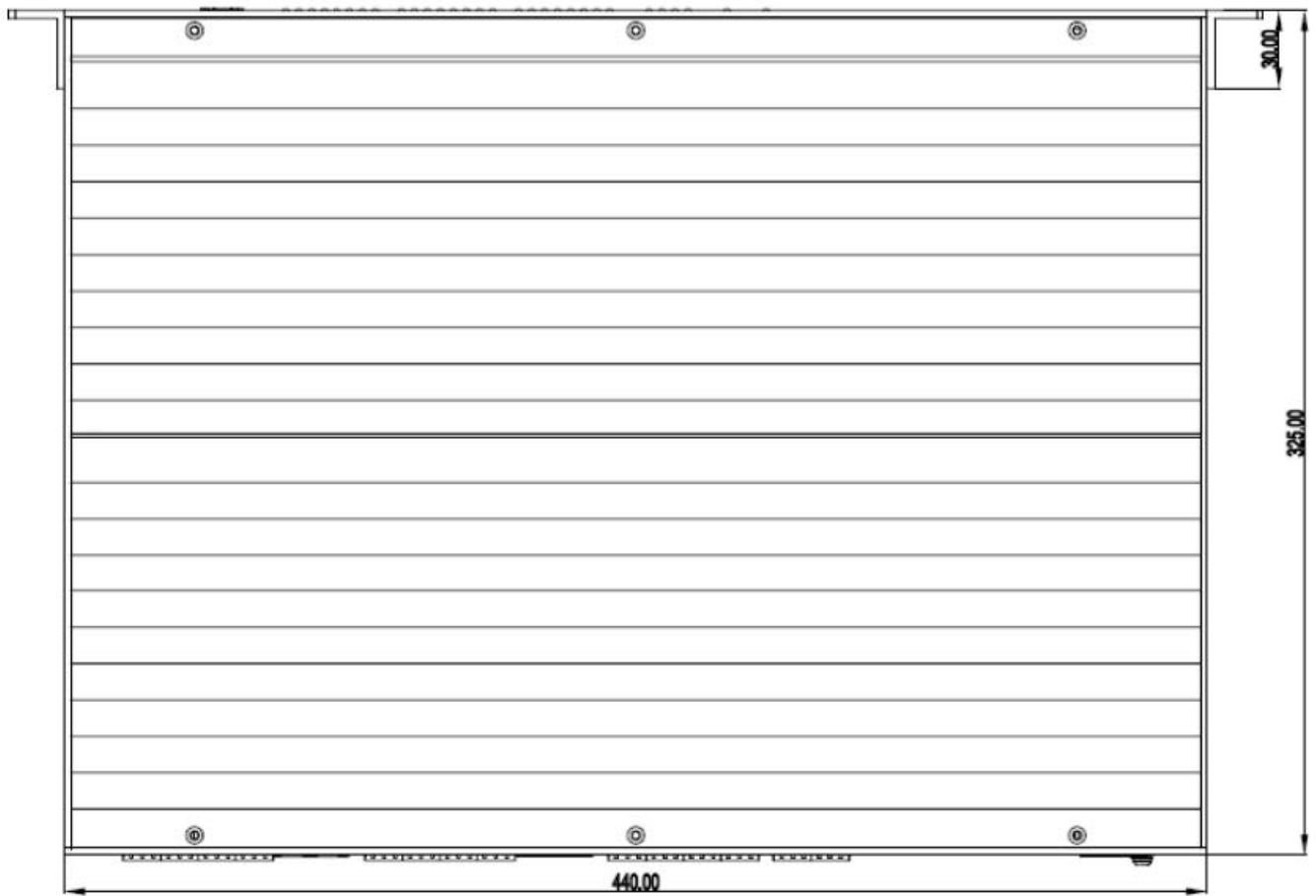
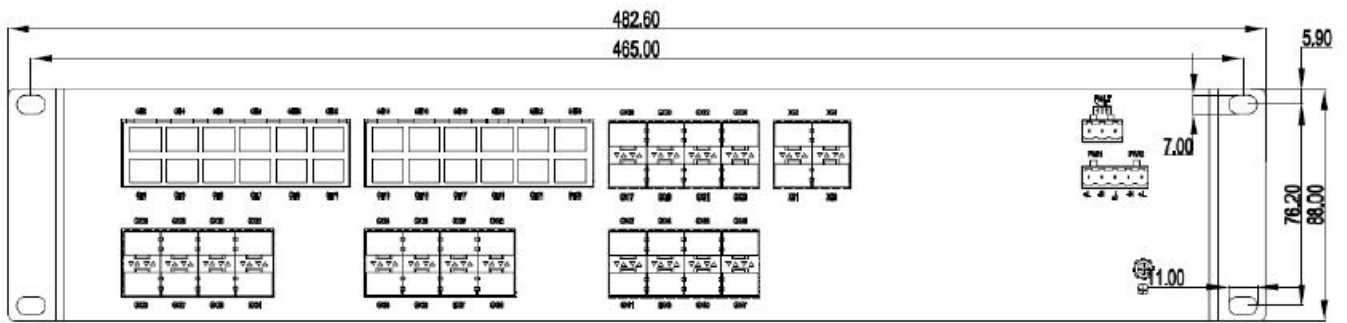
IEC61000-4-6(CS) 10V(150kHz-80MHz)

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

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Product Model	SICOM6448G-Ports-PS1-PS2
Code definition	Code selection

Ports:	<p>4X20G28GE=4×10GBase-X SFP+ ports ; 20×1000Base-X,10/100/1000Base-T(X) Combo ports; 28×10/100/1000Base-T(X) RJ45 ports</p> <p>4X8G24GX16GE=4×10GBase-X SFP+ ports; 8×1000Base-X,10/100/1000Base-T(X) Combo ports;24×1000Base-X SFP ports; 16×10/100/1000Base-T(X) RJ45 ports</p> <p>20G28GE=20×1000Base-X,10/100/1000Base-T(X) Combo ports; 28×10/100/1000Base-T(X) RJ45 ports</p> <p>8G24GX16GE= 8×1000Base-X,10/100/1000Base-T(X) Combo ports;24×1000Base-X SFP ports ; 16×10/100/1000Base-T(X) RJ45 ports</p>
PS1-PS2: power input	HV-HV=100-240VAC,50/60Hz;110-220VDC(85-264VAC/77-300VDC), redundant power inputs

Accessories

Accessory Model	Description
Gigabit SFP module	See the selection table of industrial gigabit SFP module.
10 Gigabit SFP+ module	See the selection table of industrial 10 gigabit SFP+ module.
DT-FCZ-RJ45-01	Single-port RJ45 dust plug

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