

# SICOM6800

28G ports layer 3 managed Backbone switches



## » Overview

SICOM6800 is a auto-controllable Layer3 rack mountable backbone network switch developed for occasions with high industrial control security requirements, using auto-controllable switching chips, physical layer chips, CPUs and operating systems. SICOM6800 supports up to 28 full Gigabit Ethernet ports, AC/DC dual power supply. Support DT- Ring (Recovery time < 50ms), DRP/DHP (Recovery time < 20ms), MSTP/RSTP/STP, VLAN, Multicast, QoS, SSH and other layer 2 software features; support VRRP, OSPF, RIP, IGMP, PIM, static routing and other Layer3 functions, and supports CLI, Telnet, Web multiple management methods, and network management based on SNMPv1/v2c/v3. Developed for field environment adaptability, plateau adaptability, and EMC performance devices, this series of products have the ability to work stably and reliably in harsh industrial environments.

## » Key Features

- Up to 28 Gigabit Ethernet Ports
- Supports DT-Ring, DRP/DHP, STP/RSTP/MSTP Redundancy protocol
- Supports VRRP, OSPF, RIP, IGMP, PIM, static routing
- Supports HTTPS/SSL, SSH, TACACS+, IEEE802.1X, RADIUS
- Supports User rating, MAC address binding
- Supports IEC61850 MMS management
- EMC level 4

Supports IP40 protection

## **» Product Specifications**

### **>Software functions**

#### **-Switching**

Supports VLAN,PVLAN

Supports port trunking

Supports port flow control

Supports speed limit

Supports broadcast storm control

#### **-Redundancy**

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

Supports DRP/DHP, with the recovery time<20ms

Supports STP/RSTP/MSTP

#### **-Multicast**

Supports IGMP Snooping

Supports GMRP

Supports static multicast

Supports IGMP v1/v2/v3

Supports PIM-SM,PIM-DM

#### **-Routing**

Supports VRRP

Supports RIPv1/v2

Supports OSPFv2

Supports static routing

#### **-Network Security**

Supports IEEE802.1X

Supports HTTPs/SSL

Supports SSH

Supports SFTP Client

Supports RADIUS  
Supports TACACS+  
Supports User Classification  
Supports MAC address binding with switch ports  
Supports port isolate

**-Service Quality**

Supports 802.1p, TOS/DiffServ  
Supports SP, WRR queue scheduling  
Supports ACL(Fliter L2 - L4 Data)

**-Management and Maintenance**

Supports Console,Telnet,WEB management methods  
Supports SNMPv1/v2c/v3,Kyvison centralized management  
Supports IEC61850 MMS management  
Supports software upgrade by FTP/TFTP  
Supports IP/MAC conflict alarm, power alarm, port alarm, ring alarm,IP/MAC conflict alarm,  
Memory/CPU alarm,port link up/down alarm, Ring alarm,SFP port RX power alarm;  
Supports DDM (SFP port)  
Supports RMON  
Supports port mirroring  
Supports Syslog  
Supports LLDP

**-IP management**

Supports DHCP server/snooping/client

**-Clock Management**

Supports SNTP Client  
Supports PTPv2

**>Product Specifications**

**-Technical Parameter**

Standard  
IEEE 802.3i (10Base-T)  
IEEE 802.3u (100Base-T and 100Base-FX)  
IEEE 802.3ab (1000Base-T)

IEEE 802.3z (1000Base-SX/LX)

IEEE 802.3ad (Link aggregation)

IEEE 802.3x (Flow Control)

IEEE 802.1p (Class of Service)

IEEE 802.1Q (VLAN)

IEEE 802.1d (STP)

IEEE 802.1w (RSTP)

IEEE 802.1s (MSTP)

### **-Switch Properties**

Priority Queues 8

Number of VLANs 4K

VLAN ID 1-4093

Number of Multicast Groups 1K

Routing Table 8K

MAC Table 32K

Packet Buffer 32Mbit

Switching Delay <10us

Jumbo Frame Size 10KB

### **-Interface**

Gigabit Port

100/1000Base-X SFP port

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

Console Port

RJ45, RS232

Alarm Contact

3-pin 5.08mm-spacing plug-in terminal block, 250VAC/220VDC Max, 2A Max

### **-LED**

LEDs on Front Panel

Running LED: Run

Alarm LED: Alarm

Power LED: PWR1,PWR2

Interface LED: Link/ACT, Speed (RJ45 port); Link/ACT(Fiber port)

### **-Power Requirement**

Power Input

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

24-48VDC(18-72VDC)

Power Terminal

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

Power Consumption <25W

Overload Protection Support

Reverse Protection Support

Redundancy Protection Support

### **-Physical Characteristics**

Housing Metal

Cooling Natural convection, fanless

Protection Class IP40

Dimension 440mm×44mm×322mm (W×H×D)

Weight 5Kg

Mounting DIN-Rail or Panel Mounting

### **-Environmental Limit**

Operating Temperature -40°C ~ +75°C

Storage Temperature -40°C ~ +85°C

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

### **-Warranty**

MTBF 936443h

Warranty 5 years

**-Approvals**

CE, FCC(Pending)

**-Industrial Standard**

EMI

FCC CFR47 Part 15,EN55032/CISPR22,Class A

EMS

IEC61000-4-2(ESD)  $\pm 8\text{kV}$ (contact), $\pm 15\text{kV}$ (air)

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

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

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

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

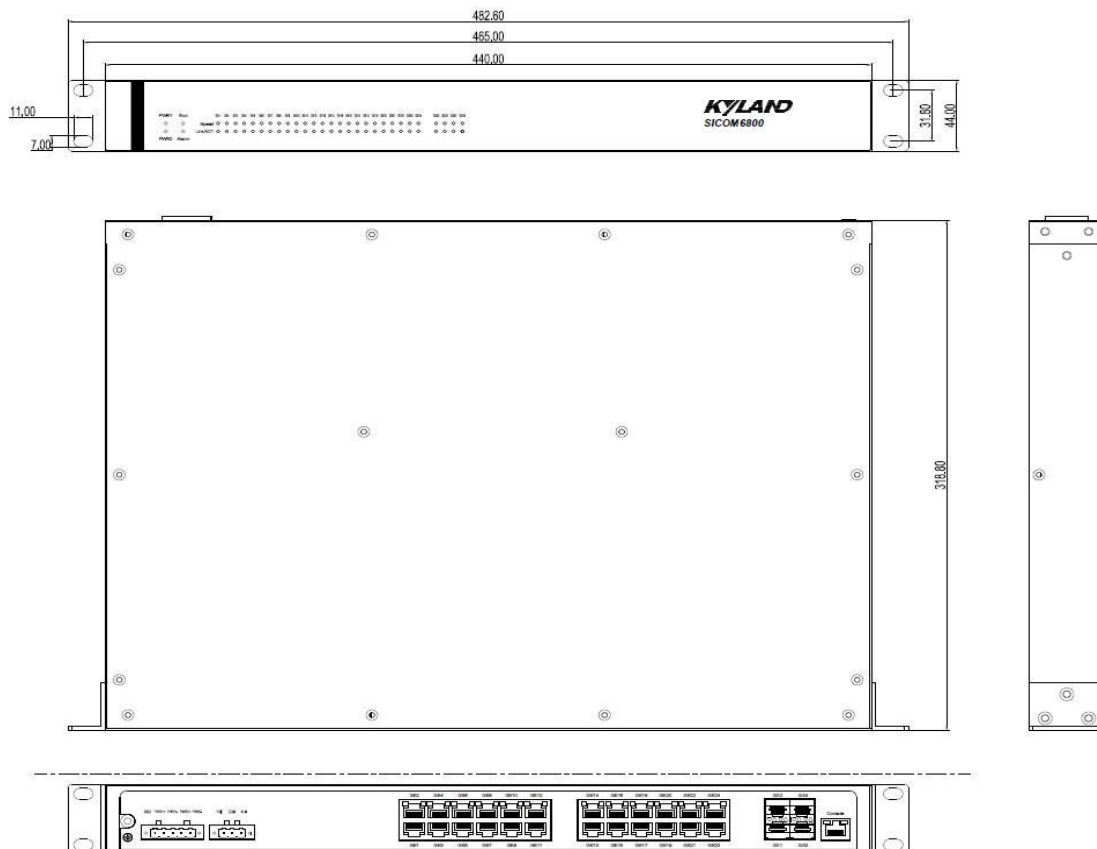
Machinery

IEC60068-2-6 (vibration)

IEC60068-2-27 (shock)

IEC60068-2-32 (free fall)

**» Mechanical Drawing**



后面板图

## » Ordering Information

### Ordering Information

Product Model	SICOM6800-Ports-PS1-PS2
Code definition	Code selection
Ports	<p>4GX24GE= 4×100/1000Base-X SFP ports;24×10/100/1000Base-T(X) RJ45 ports;</p> <p>4GX16SFP= 4×100/1000Base-X SFP ports;16×100Base-X SFP ports;</p> <p>16GX= 16×100/1000Base-X SFP ports;</p>
PS1-PS2	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.
100M SFP module	See the selection table of industrial 100M SFP module.
DT-FCZ-RJ45-01	Single-port RJ45 dust plug