

# **SICOM6800**

# 28G ports layer 3 managed Backbone switches





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

Complies with Cybersecurity IEC62443-4-2

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

Complies with cyber security IEC62443-4-2

### -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)  $\pm 8kV(contact), \pm 15kV(air)$ 

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) 10V(150kHz~80MHz)

Machinery

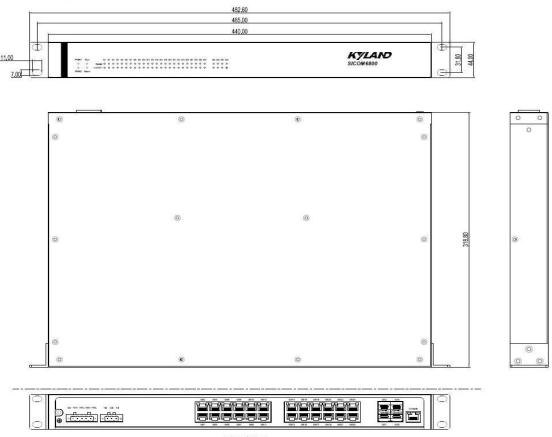
IEC60068-2-6 (vibration)

IEC60068-2-27 (shock)

IEC60068-2-32 (free fall)

# **>>>**

# **Mechanical Drawing**







# >>> Ordering Information

# **Ordering Information**

| Product Model   | SICOM6800-Ports-PS1-PS2   |
|-----------------|---|
| Code definition | Code selection  |
| Ports           | 4GX24GE= 4×100/1000Base-X SFP ports;24×10/100/1000Base-T(X) RJ45 ports; 4GX16SFP= 4×100/1000Base-X SFP ports;16×100Base-X SFP ports; 16GX= 16×100/1000Base-X SFP ports; |
| 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                                |