

SICOM3306PT



Layer 2 6+3G port Managed Din Rail IEEE1588v2 Industrial Ethernet Switch

- 3 100/1000Base-X SFP ports, 6 10/100Base-TX RJ45 ports
- Support IEEE1588v2
- Support SyncE (ITU-T.G.8261/G.8262)
- Support IEC62439-6/DRP, DT-Ring, RSTP and MSTP ring protocols
- Support reset button for fast reboot or loading default settings
- Provides Mini USB Console port, supports setting backup and recovery through USB
- Supports VCT (Virtual Cable Test)
- IP40 protection class
- Exceeds IEC61850-3 & IEEE1613
- CE, FCC certifications



Overview

SICOM3306PT Series is Kyland Din Rail IEEE1588v2 industrial Ethernet switch implementing IEEE1588v2 clock synchronization with hardware time stamping over each of the 3 Gigabit SFP ports and 6 10/100Base-TX ports. Combining IEEE1588v2 and SyncE (ITU-T.G.8261/G.8262), the synchronization precision accuracy can reach 10 nanoseconds which exceeds all the highest level of requirements for clock synchronization solution in smart grid and power utilities. SICOM3306PT is equipped with IEC62439-6/DRP ring protocol which enables less than 20ms recovery time. It also supports DT-Ring, RSTP/STP, MSTP and VRRP. Mini USB console port enables configuration easy backup and restore. Exceeding IEC61850-3 and IEEE1613 standards, SICOM3306 Series is specifically designed to operate reliably in electrically harsh and climatically demanding utility substation and industrial environments.

Features & Benefits

1. Redundancy Technology: supports IEC62439-6 (recovery time<20ms), DT-Ring and MSTP
2. Multicast Protocol: supports IGMP Snooping, GMRP and static multicast
3. Network Partition: supports VLAN, GVRP, PVLAN, Service Quality: supports QoS
4. Bandwidth Management: supports port trunking, port speed limit, broadcast storm control
5. Network Management and Monitoring: supports CLI, Telnet, WEB management methods, Kyvision centralized management, SNMPv1/v2/v3, RMON, LLDP
6. Clock Synchronization: Support SNTP, IEEE1588v2, SyncE(ITU-T.G.8261/G.8262)
7. Network Security: supports MAC address binding with port, IEEE802.1X, SSH, SSL, TACACS+, ACL
8. Device Management: supports FTP/TFTP upgrade, also supports Syslog upload and download

9. Device Maintenance: supports port mirroring, VCT (Virtual Cable Test)
10. Alarm Output: supports IP/MAC conflicts, power, port and ring alarms
11. Special Function: supports Link Check and Loop Status Check

Technical Specifications

Standard

IEEE802.3i, IEEE802.3u, IEEE802.3ab, IEEE802.3ac, IEEE802.3ad, IEEE 802.3z, IEEE 802.3x, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1s, IEEE802.1X, IEEE1588-2008 IEC62439-6, SyncE (ITU-T.G.8261/G.8262)

Protocols

DT-Ring,DT-Ring+,DT-VLAN,MSTP,DRP;
IGMPsnooping,GMRP;VLAN,GVRP,PVLAN;
Telnet,HTTP,HTTPS,SNMPv1/v2/v3,RMON,LLDP,Bootp,DHCP
server/relay/client,DHCP Option 82;
SNTP,PTP,RTC;
SSH,SSL,TACACS+,RADIUS,ACL;
FTP,TFTP,Syslog;
ARP,Modbus TCP,QoS,LACP

Switch Properties

Priority Queues: 4
Number of VLANs: 256
VLAN ID: 1-4094
Number of Multicast Groups: 256
MAC Table: 8K
Packet Buffer: 1Mbit
Packet Forwarding Rate: 5.5Mpps
Switching Delay: <5μs

Interface

Gigabit Ethernet Ports: 3 100/1000Base-X SFP ports
Fast Ethernet RJ45 Ports: 6 10/100Base-TX RJ45 ports
Console Port: Mini USB
Alarm Contact: 3-pin 5.08mm-spacing plug-in terminal block,
250VAC/220VDC Max, 2A Max, 60W Max

LED

LEDs on Front Panel:
 Running LED: Run
 Alarm LED: Alarm
 Power LED: PWR1, PWR2
 Ring LED: Ring
 Clock Sync LED: LOCK
 Interface LED: Link/ACT, Speed (RJ45 port)

Reset Button

Reboot and restore default configuration

Transmission Distance

Twisted Pair: 100m (Standard CAT5, CAT5e network cable)
 Multi Mode Fiber: 850nm, 550m (1000M)
 Single Mode Fiber:
 1310nm, 10km/40km (1000M)
 1550nm, 60km/80km (1000M)

Power Requirements

Power Input: 24DCW (18-72VDC), 220AC/DCW(85-264VAC/77-300VDC)
 Power Terminal: 5-pin 5.08mm-spacing plug-in terminal block
 Power Consumption: 16W
 Overload Protection: Support
 Reverse Connection Protection: Support
 Redundancy Protection: Support

Physical Characteristics

Housing: Metal, fanless
 Protection Class: IP40
 Dimensions (WxHxD): 88x135x137mm (3.46x5.31x5.39 in.)
 Weight: 2.25kg (4.96 pound)
 Mounting: DIN-Rail or panel mounting

Environmental Limits

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

MTBF

345,000 hrs

Warranty

5 years

Approvals

CE, FCC

Industrial 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)

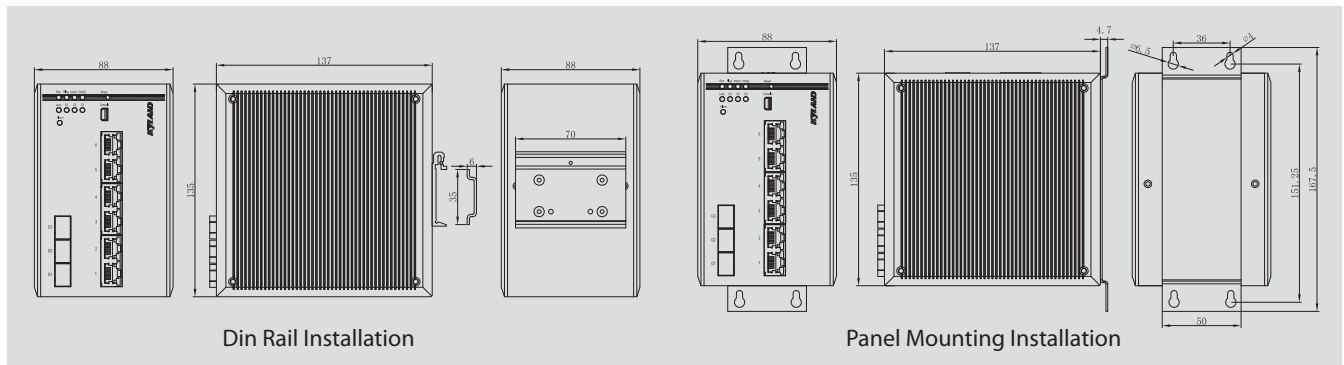
Machinery:

IEC60068-2-6 (Vibration)
 IEC60068-2-27 (Shock)
 IEC60068-2-32 (Free Fall)

Industry: IEC61000-6-2

Railway: EN50155, EN50121-4

Traffic Control: NEMA TS-2

➤ Mechanical Drawing**➤ Ordering Information**

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 Ports PS

Ports

3GX-6T = 3 Gigabit SFP ports, 6 10/100Base-TX ports
 2GX-6T = 2 Gigabit SFP ports, 6 10/100Base-TX ports

PS: Power Supply

24DCW = 18-72VDC, dual redundant power inputs
 220AC/DCW = 85-264VAC/77-300VDC, single power input

Example Order Codes

SICOM3306PT-3GX-6T-24DCW

3 Gigabit SFP ports, 6 10/100Base-TX RJ45 ports, 18-72VDC, dual redundant power inputs