

SNM1406

Industrial 4-Port High PoE Managed Switch



4 PoE 10/100 Base TX

2 Redundant 10/100 TX

High Power PoE.

Web Management.

-40-60° Operating Temperature.



OVERVIEW

SNM1406 is designed for industrial PoE applications such as IP surveillance or wireless access points, where power source is not conveniently located. It supports intelligent PoE control and schedule management; each of the four PoE ports can be configured in a weekly schedule by hourly basis and PoE on/off can be remotely controlled via SNMP and Web. Compliant to IEEE 802.3af PoE standard, SNM1406 can deliver up to 25W power per port and 80W per unit (@60oC) by the forced powering mode. Full network management features such as LLDP, Siselectron NMS, SNMP v3, QoS, IGMP snooping v3, are all supported. Wide operation temperature range ensure a reliable operation in mass transit vehicles, for outdoor usage, etc.

The four port PoE can be configured to enable, disable or schedule PoE function by the web interface. The Power mode provides Standard mode for IEEE 802.3af PD, Manual mode for user configuration of the power limit to IEEE 802.3af standard PD, or Ultra mode for user configuration to perform at the 25W power limitation. After configuration, the real-time status of PoE is shown in web interface.

Performance

- Store and Forward Technology with 3.2Gbps wire-speed non-blocking Switch Fabric
- System Throughput: 1.785Mpps
- MAC Address: 2000
- Packet Buffer: Embedded 1Mbits shared buffer

BENEFITS

- Four 10/100 TX Power over Ethernet ports and two redundant 10/100 TX uplink ports
- DC 48V Power Input for IEEE 802.3af 48V PoE output
- Up to 25W per port for High Power solution by Forced powering mode
- Auto-detect Powered Device status for device auto-reset (LPLD)
- Patented Multiple Super Ring technology(MSR TM), up to 5ms recovery time
- PoE control and schedule by hour/weekly basis
- Patented Rapid Dual Homing (RDH TM) technology
- SNMP v1/v2c/v3, IGMP snooping v1/v2/v3, RMON, VLAN, QoS.
- Network security by IP/MAC address,SSL and SSH
- Built-in hardware watchdog timer for system auto-reset

- Transfer performance: 14,880pps for Ethernet and 148,800 for Fast Ethernet and transfer packet size from 64 to 1522Bytes
- PoE Technology: End-Span wiring architecture standard, and 25W High power deliver procedures for class ID4.
- Protection: Provides over-current protection by PD class ID

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Technology

- Standard: IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.1p Class of Service
- IEEE 802.3 Flow Control and Back-pressure
- IEEE 802.1d Spanning Tree
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

Management

- Management interface: SNMP v1, v2c and v3, Web browser, Siselectron Technology NMS
- Management Security: 4 entries for web, telnet, SNMP management security
- SNMP Trap: Provides Cold start, Warm start, Port event, Power event, Authentication failure, PoE trap and Siselectron Technology private trap for proprietary functions
- SNMP MIB: Ethernet MIB, Siselectron Technology Private MIB
- Siselectron Technology Utility: Supports Siselectron Technology NMS with IEEE 802.1AB Link Layer Discovery Protocol for device and link auto-topology discovery
- Firmware upgrade: TFTP and HTTP
- System Log: 1000 system entries for system or remote log server
- Event Alarm Relay: for port link down, PoE and System power events
- Quality of Service: Quality of Service determined by port, Tag and IPv4 Type of Service
- Class of Service: IEEE802.1p class of service, with 4 priority queues
- DHCP: Supports DHCP Client and DHCP Server function
- Timer: Supports Network Time Protocol (NTP) to synchronize time from NTP Server
- VLAN:
Port based VLAN
- IGMP Snooping:
Supports IGMP Snooping v1/v2/v3 and IGMP Query v1/v2

- Network Redundancy:
Function for network redundancy with 5ms network recovery time; To inter-operate with other higher level switches, SNM1406 provides Dual Homing II technology to SNM1406 also conforms with IEEE802.1D 2004 edition
- PoE Control:
Enable, disable, or based on Schedule
- Power Limit Control:
The control mode supports IEEE802.3af Standard, Manual and Ultra mode for 25W Hi-power or forced powering mode for Non-standard PD. The maximum DC power delivery on each PoE port is 12.9W@DC 48V input or 25W @ DC57V input
- PoE Schedule Control:
Each PoE port can be activated and powered scheduling with different rule. It supports weekly schedule on hourly basis
- IP Security:
IP security to prevent unauthorized access

Interface

- Number of Ports:
 - 4 x 10/100Base-TX with PoE Injector
 - 2 x 10/100Base-TX ports
 - 1 x RS-232 Console
- Connectors:
 - 10/100TX RJ-45
 - Console: RJ-45
 - Power & relay alarm: 6-pin Terminal block
- Cable:
100Base-TX: 4-pair UTP/STP, Cat.5e/
Cat.6 cable, EIA/TIA 568B 100-ohms (100m)
- Reset Button:
For system reboot and factory default setting

- Diagnostic LED:
 - Power LED: Power 1/Power 2 (Green)
 - Fast Ethernet Port 1~4: Link(Green)/ Activity (Green blinking)
 - PoE Powering (Yellow on), PoE Detect (Yellow blinking)
 - PoE Disable (Yellow off),
 - PoE Powering failure (Yellow fast blinking)
 - Fast Ethernet Port 5,6: Link(Green) / Activity (Green blinking)

Power Requirements

- System Power:
Support positive or negative power system with DC 48~57V power input range and polarity reverse protection
- Power Consumption:
8 Watts @ 50V (Maximum) without PD loading

Mechanical

- Installation:
DIN-Rail mount or desktop or Wall mount
- Case: IP31 grade aluminum metal case
- Dimension: 46.5 mm (H) x 147.8mm (W) x 136 mm (D) without DINrail clip
- Weight:
 - 0.72 kg with package
 - 0.65 kg without package

Environmental

- Operating Temperature: -40 ~ 60
- Operating Humidity: 0% ~ 95%, (non-condensing)
- Storage Temperature: -40 ~ 80
- Storage Humidity: 5%~ 95%, (non condensing)