# SUNDRAY Gigabit POE switch

## Product Overview

With full Gigabit and high performance characteristics, SUNDRAY SI3200-24H-PWR adopts the new generation switch chip and serves as one component of the entire SUNDRAY wireless solution; it can supply power for the wireless AP through cable, and provides single port up to 30W power, and fully satisfies the requirement of the new generation wireless AP, and establishes a safer, faster and value-added WLAN network for the enterprises.



## Product Features

➢ Maximum supporting 15.4W output power/af with 21 ports or 30W output power/at with 10 ports;

➢ Supporting IEEE802.3at(30W) standard, and being compatible with IEEE802.3af (15.4W) powered device (PD)

➢ The traditional mode is broken; not only the data can be transferred, but also the electric power can be transmitted via the cable.

➢ The powered device complying with the IEEE 802.3at and IEEE 802.3af standard can be automatically detected;

➢ Advanced self-sensing arithmetic only supplies power for the terminal equipment with IEEE 802.3af/at standard; it is not necessary to worry about the Non-POE equipment or POE equipment with private

standard being damaged;

➢ Power supply priority of the port is supported; the constant power supply of the key network nodes is ensured;

➢ The longest transmission distance of the power supplied by the cable is 100 meters, which can flexibly extent the network and not be restricted by the electric-power line, and easily hung up the terminal equipment such as the wireless AP and the web cam on the wall or the ceiling.

# Technical specifications

**SI3200-24H-PWR**

| Specifications of the SUNDRAY Gigabit POE switch | |
|---|---|
| **Item** | **SI3200-24H-PWR** |
| Fixed ports | 24 10/100/1000M electrical ports (24 POE ports) |
| | 4 Gigabit SFP optical ports（Combo） |
| Standard of power supply | IEEE802.3af/at |
| Maximum output power of the single port | 30W |
| Switch maximum POE output power | 320W |
| POE power supply pin | 1/2(+)，3/6(-)；can be customized 4/5(+),7/8(-) |
| Forwarding pattern | Storage forwarding with Full line rate |
| Forwarding rate | 10M：14880pps/port |
| | 100M：148809pps/port |
| | 1000M：1488095pps/port |
| Temperature for operating | 0~50°C |
| Temperature for storage | -40~70°C |
| Working humidity | 10%~90%(no condensation) |
| Storage humidity | 5%~90%(no condensation) |
| Weight | <5Kg |
| Input power | AC：90-264V ~ 50-60Hz/450W |
| Physical dimension(L×W×H) | 440mm×285mm×44.5mm |
| LED indicator | Power，Link/Act，POE Status |
| Energy Saving and Environmental Protection | complying with the international standard of the "EEE" environmental protection and energy conservation |
| Protocol/standard | IEEE 802.3af，Ethernet power supply POE standard; |
| | IEEE 802.3at，Ethernet power supply POE+ standard; |
| | IEEE 802.3u，Fast Ethernet standard; |
| | IEEE 802.3ab，Gigabit Ethernet standard; |
| | IEEE 802.3z，Gigabit Ethernet fiber-optical standard; |
| | IEEE 802.3ad，link aggregation protocol; |
| | IEEE 802.3x，full-duplex Ethernet data link layer flow control; |
| | IEEE 802.3az，EEE energy-efficient Ethernet standard; |
| | IEEE 802.1q，VLAN standard ; |
| | IEEE 802.1p，QoS/CoS quality of service; |

| | |
|---|---|
| | IEEE 802.1d，STP spanning tree protocol; |
| | IEEE 802.1w，RSTP fast spanning tree protocol; |
| MAC address | Support 16K MAC address table |
| | Automatically update and dual-way learning are supported; |
| VLAN | The maximum number of the supported VLAN is 4096; |
| | The VLAN based on port is supported; |
| | The 802.1Q standard VLAN is supported |
| Spanning tree | STP spanning tree protocol is supported; |
| | RSTP fast spanning tree protocol is supported; |
| Port aggregation | The aggregation of eight groups is supported; up to four ports can be supported by each group; |
| Port mirroring | Bidirectional transceiving Port mirroring is supported |
| Loop circuit protection | The functions of loop circuit protection, real-time monitoring, promptly alarming, accurate positioning, intelligent blocking and automatic recovery are supported; |
| Port isolation | Supporting the isolation of the downstream ports, meanwhile supporting the communication with the upstream ports ; |
| Port flow control | Half-duplex -based back pressure control is supported; |
| | Full duplex-based PAUSE frame is supported; |
| Port-rate limiting | Input/output bandwidth management based on the port is supported; |
| Jumbo frames | Support 9216Byte at the maximum |
| Multicast control | Supporting the IGMP SNOOPING |
| Storm restrain | All ports support the broadcast storm restrain based on the packet forwarding rate; |
| Security features | MAC binding of the port is supported; |
| | The security limit of the number of the MAC addresses based on the port is supported; |
| QOS | SP（Strict Priorty），strict priority round robin algorithm; |
| | WFQ (Weighted Fair Queuing) weighted fair queuing; |
| | WRR (Weighted Round Robin)，weighted priority round robin algorithm; |
| | 802.1p port queue priority algorithm |
| | Differentiated Service ; |
| Physical medium | 10Base-T：<br>EIA/TIA-568 standard ($\leqslant$ 100M)for the unshielded twisted pair of the second, third, forth and fifth type; |
| | 100Base-TX：<br>EIA/TIA-568 standard ($\leqslant$ 100M)for the unshielded twisted pairs of the second, forth and fifth type; |
| | 1000Base-T： EIA/TIA-568 standard ($\leqslant$ 100M)for the unshielded twisted pairs of four, fifth type(type 6 is recommended); |
| Cable sequence | Auto-MDIX function is supported; the Straight-through cable and crossover cable can be automatically identified; |
| Negotiation mode | The function of the automatic negotiation is supported by the port (self-negotiated transmission rate and the duplex mode); |

| PHY detection | Detecting the connectivity of the cable is supported; |
|---|---|
| System Maintenance | Uploading/loading configured files is supported; |
| | Uploading the upgrade package is supported; |
| | Support WEB factory reset |
| | The recovery of the factory configuration by port short circuit is supported; |
| Network management | The WEB interface management is supported; |

## Ordering Information

| SUNDRAY Gigabit POE switch | | |
|---|---|---|
| Model | Specification | Remarks |
| SI3200-24H-PWR | Having 24 Gigabit electrical ports and 4 optical ports, the PoE switch supports 802.3 af/at. | Essential |
| OM-SFP-Gigabit- Multimode | Multimode fiber optical modules of the Gigabit SFP is 550m; | Optional |
| OM-SFP-Gigabit-Single-mode-10 | Single-mode fiber optical module of the Gigabit SFP is 10 km; | Optional |
| OM-SFP-Gigabit-10kmSingle-mode-20 | Single-mode fiber optical module of the Gigabit SFP is 20 km; | Optional |
| OM-SFP-Gigabit-Single-mode-40 | Single-mode fiber optical module of the Gigabit SFP is 40 km; | Optional |
| OM-SFP-Gigabit-Single-mode-80 | Single-mode fiber optical module of the Gigabit SFP is 80 km; | Optional |
| O/E-SFP | Photoelectric conversion module of the Gigabit SFP; | Optional |