

## 20 Port 10/100/1000M AI PoE Switch



### 【Introduction】

20-Ports 1000M Ethernet Power Switch (PoE Switch), using high-quality high-speed network IC and the most stable PoE chip, PoE Port support 802.3af and 802.3at standard both, this series of PoE Switch can be 10/100/1000M Ethernet The network provides a seamless connection, and the PoE power port can automatically detect and power the powered devices that comply with the IEEE802.3af or IEEE802.3at standards. The non-PoE device intelligently detects no power and only transmits data.

PoE is Power over Ethernet, which refers to the transmission of data signals to some IP-based terminals (such as IP phones, wireless access AP, network cameras, etc.), but also provides DC power for this device. Technology, these devices that receive DC power are called powered devices.



With simple and convenient installation and maintenance methods and rich business features, it helps users to build a safe and reliable high-performance network. It is mainly located in the core or convergence layer of user networks such as industrial parks, buildings, factories and mines, government agencies, and residential broadband; it can be widely used in Ethernet access scenarios such as small and medium-sized enterprises, Internet cafes, hotels, and schools.

### **【Main Features】**

- 16\*10/100/1000M POE ports + 2\* 10/100/1000M Ethernet Uplink ports+2 Uplink Gigabit SFP por;
- Comply with IEEE 802.3, IEEE 802.3u, IEEE802.3af/at standards;
- Ethernet port supports 10/100/1000M adaptive and POE functions;
- Flow control mode: full-duplex adopts IEEE 802.3x standard, half-duplex adopts Back pressure standard;
- Support port auto flip (Auto MDI/MDIX);
- Automatically supplied to adaptive devices;
- Panel indicator monitoring status and help failure analysis;
- Support for VLAN mode, AI Watchdog mode and PoE Force Output mode;
- Support the PoE port has a priority power supply mechanism. When the remaining power is insufficient, priority is given to ensuring the power supply of the high priority port to avoid equipment overload;
- Support ports 1-16 support AI recognition for long distances. When the network cable length is less than 100 meters, the default speed is 100Mbps. When the network cable length is longer than 100 meters, the speed of corresponding port automatically drops to 10Mbps, and the PoE power supply and data transmission distance can be extended to 250 meters.
- Lightning Protection Surge: General Mode 4KV, Differential Mode 6KV, ESD 8KV.

### **【Application Environment】**

- Metro Optical Broadband Network: Data network operators such as telecommunications, cable TV, and network system integration,etc.
- Broadband private network: Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries



- Multimedia transmission: Integrated transmission of images, voice and data, suitable for remote teaching, conference TV, videophone and other applications
- Real-time monitoring: Simultaneous transmission of real-time control signals, images and data

### 【Specifications】

I/O Interface	
Power	Input: AC 100-240V, 50/60Hz
Ethernet	16 Port 100/1000M PoE + 2 Port Gigabit Ethernet Uplink+2 Uplink Gigabit SFP port
Performance	
Switching Capacity	40Gbps
Throughput	29.76Mpps
Packet Buffer	4M
MAC Address	4K
Jumbo Frame	2048bytes
Transfer Mode	Store and forward
MTBF	100000 hour
Standard	
Network protocol	IEEE802.3 (10Base-T) IEEE802.3u (100Base-TX) IEEE802.3x (Flow control)
PoE Protocol	IEEE802.3af (15.4W) IEEE802.3at (30W)
Industry Standard	EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD) EN61000-4-4 (EFT) EN61000-4-5 (Surge)
Network Medium	10Base-T : Cat3、4、5 UTP(≤250m) 100Base-TX : Cat5 or later UTP(≤100m) 1000Base-T : Cat5 or later UTP(≤100m)



Protection	
Security Certificate	CE、FCC、RoHS
Environment	
Working Environment	Working Temperature: -20~50° C Storage Temperature: -40~85° C Working Humidity : 10%~90%, non-condensing Storage Temperature: 5%~90%, non-condensing Working Height: Maximum10,000 feet Storage heigh: Maximum 10,000 feet
Indication	
PWR (power supply)	Lighting: Powered Un-Light: No Power Lighting on: Force Output
1-10 Green (Link&Data)	Lighting: Connecting Flashing: Data Transmit Un-Light: Disconnect
Mechanical	
Structure Size	Product Dimension (L*W*H): 300mm*160mm*44mm N.W: 2.3kg G.W: 2.4kg
Packing Info	Packing Qty: 10 units Packing Weight: 26KG
Power Voltage	Input Voltage : AC 100-240 V Power supply: 52V3.85A
Package List	Switch 1 pcs, Power cord 1 pcs, User manual 1 pc, Certificate 1 pc
Ordering Info	
KN-SG1602SP	20-port 10/100/1000M AI PoE Switch