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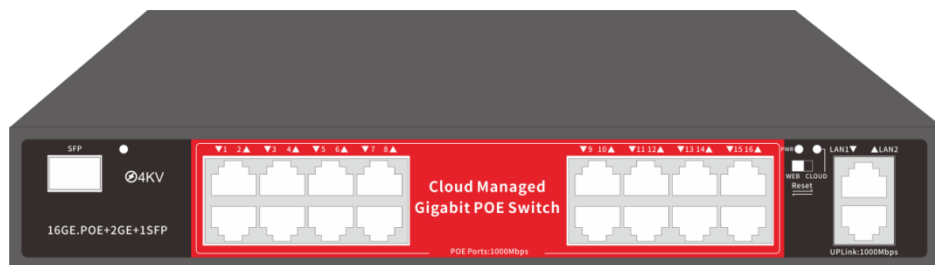
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# Cloud Management Series POE Switch Specification

## 1. Product Introduction:

This product is a cloud network management series Ethernet POE power supply switch, which independently developed by our company and provides 16 1000Mbps adaptive POE power supply RJ45 ports, and 2 upstream 1000Mbps adaptive RJ45 interfaces and 1 1000Mbps SFP interface, and can be used as an Ethernet power supply device. All power supply ports can automatically detect and identify the powered devices that meet the IEEE 802.3af/at standard; It supports remote mobile phone access for monitoring the operating status of the switch and the management of various network functions. The switch can be remotely managed through the APP "Amitres IOT", and the switch ports can be remotely viewed and managed. It also supports management through web page login.



## 2. Functional Feature

- Follow the IEEE 802.3 Ethernet and IEEE 802.3u Fast Ethernet protocol standards;
- Support the 802.3af/at standard protocol, with intelligent detection for power supply, and will not burn out non-powered devices;
- Overcurrent, overload, and short circuit protection, to eliminate hidden dangers and ensure power supply safety;
- Support 802.1Q VLAN, Port VLAN, suitable for a variety of networking business needs;
- Second gear mode: WEB + CLOUD (domestic factory default CLOUD, overseas default WEB);
- Support APP "Amitres IOT" remote management switch, support local web management;
- Support DHCP snooping, port mirroring, port management and other functions;
- Support broadcast and multicast storm suppression;
- Cloud network management: Visual remote management, on-site problems, remote resolution;
- Provides 16 1000Mbps adaptive POE power supply RJ45 ports, and 2 upstream 1000Mbps adaptive RJ45 interfaces and 1 1000Mbps SFP interface
- All ports support the function of automatic flipping (Auto MDI/MDI-X);
- Support IEEE802.3X full-duplex flow control and Backpressure half-duplex flow control;
- Support the independent learning and aging of MAC addresses;
- All-metal shell, and the whole machine is fully loaded with 240W;
- plug and play;

### 3. Functional Switch And Definition Of Indicator:



#### Indicator Light:

| Indicator Light      | Definition | Functional Description                                                         |
|----------------------|------------|--------------------------------------------------------------------------------|
| Functional Indicator | PWR        | Switch power status indicator, light up to indicate that the device is started |
|                      | CLOUD      | ON: Remote cloud management function is turned on                              |
| Port Indicator       | Link/ACT   | ON: the port link is normal; Flashing: data transmission is in progress        |

#### Gear Description

| Gear  | Definition             | Functional Description                                                                                                          |
|-------|------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| CLOUD | Remote Management Mode | Enable local WEB management and remote APP management functions                                                                 |
| WEB   | Local Management Mode  | WEB local management mode                                                                                                       |
| RESET |                        | The switch is at WEB, within 1 second, unplug to CLOUD and then unplug back to WEB, switch restart and restore factory settings |

### 4. General Specs

| Item                                       | Data                                                                                                                                                                                                                                         |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port Composition                           | 16 1000Mbps POE RJ45 ports and 2 1000Mbps cascading RJ45 port and 1 1000Mbps SFP interface.                                                                                                                                                  |
| Backplane bandwidth                        | 38G                                                                                                                                                                                                                                          |
| MAC address                                | 2K                                                                                                                                                                                                                                           |
| Packet forwarding rate@64byte (throughput) | 28.272Mpps                                                                                                                                                                                                                                   |
| power supply                               | AC input 100-240V, 240W single power supply                                                                                                                                                                                                  |
| Network medium and transmission distance   | 1000Base-T: 4 pairs of Super 5 category (Cat5e) or above UTP/STP ( $\leq 100m$ )<br>100Base-TX: 2 pairs to 5 Category(Cat5) or above UTP/STP( $\leq 100m$ )<br>10Base-TX: 2 pairs of Super 5 Category(Cat5e) or above UTP/STP( $\leq 250m$ ) |
| Power supply line sequence                 | 12/36、45/78 all line sequence                                                                                                                                                                                                                |

## 5. Software Specifications

| Item                             | Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic functions                  | <p>Follow the IEEE 802.3 Ethernet and IEEE802.3u Fast Ethernet protocol standards</p> <p>Compatible with powered devices (PD) that conform to the IEEE 802.3af/at standard.</p> <p>Compatible with certified non-standard powered devices (PD).</p> <p>Store and forward</p> <p>The independent learning and aging of MAC addresses.</p> <p>IEEE802.3X full-duplex flow control and Backpressure half-duplex flow control</p>                                                                         |
| Ethernet Protocols And Standards | <p>IEEE 802.3 Ethernet Media Access Control Protocol</p> <p>IEEE 802.3i 10BASE-T Ethernet</p> <p>IEEE 802.3u 100BASE-TX Fast Ethernet</p> <p>IEEE 802.3ab 1000BASE-T Gigabit Ethernet</p> <p>IEEE 802.3z 1000BASE-X SFP interface</p> <p>IEEE 802.3af To achieve the power supply of Ethernet devices through Ethernet data lines or devices</p> <p>IEEE 802.3at To achieve high-power power supply of Ethernet devices through Ethernet data lines or devices</p> <p>IEEE 802.3x Traffic control</p> |
| Data Transmission Rate           | <p>Ethernet 10Mbps half-duplex, 20Mbps full-duplex.</p> <p>Fast Ethernet 100Mbps half-duplex, 200Mbps full-duplex.</p> <p>Gigabit Ethernet 2000Mbs Full-Duplex</p>                                                                                                                                                                                                                                                                                                                                    |

| Item                               | The supported contents of the remote control end (through the APP "Amitres IOT")                                                                                                                                 |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cloud Management: Information View | Switch SN information, device model, firmware version, real-time IP, real-time port power, port LINK status, link duplex, up and down rate, VLAN status;                                                         |
| Cloud Management: Device Operation | Port isolation setting, port restart, port POE switch, port speed limit, port ultra-long switch, switch whole machine restart, whole machine setting reset, port duplex setting, firmware upgrade, VLAN setting; |
| Safety Features                    | <p>Order-based protection</p> <p>Support DHCP snooping and DHCP attack protection</p> <p>Support end-port security and end-port isolation</p> <p>Support CPU protection function</p>                             |
| Access Control (ACL)               | Supports port mirroring, port redirection                                                                                                                                                                        |
| Management And Maintenance         | <p>Support WEB management</p> <p>Support PC client side management</p> <p>Support remote management via APP "Amitres IOT"</p>                                                                                    |

## 6. POE Performance

| Item                                                           | Data      |
|----------------------------------------------------------------|-----------|
| IEEE802.3af                                                    | Supported |
| IEEE802.3at                                                    | Supported |
| The Maximum Power Output Of The Port                           | 30W       |
| Overcurrent Protection                                         | Supported |
| Overvoltage Protection                                         | Supported |
| Short Circuit Protection                                       | Supported |
| Sequential startup (to avoid excessive instantaneous current). | Supported |
| High power PD soft start.                                      | Supported |

## 7. Environmental Requirements

| Environment | Data                                                                                                                                  |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Temperature | Operating temperature: 0°C ~ 40°C<br>Storage temperature: -40°C ~ 70°C                                                                |
| Humidity    | Operating humidity: 10% ~ 90% RH(Relative Humidity) non-condensing<br>Storage humidity: 5% ~ 90% RH(Relative Humidity) non-condensing |
| Altitude    | Operating altitude: Maximum 6500 feet (2000 meters)<br>Storage altitude: Maximum 6500 feet (2000 meters)                              |

## 8. Product Weight

| Category                          | Weight               |
|-----------------------------------|----------------------|
| Naked Machine (Without Packaging) | Approximately 1.35kg |
| The Entire Box Weight (10 PCS)    | Approximately 18kg   |

## 9. Lightning Surge Protection (10/700us)

| Performance       | Data |
|-------------------|------|
| Differential Mode | 4KV  |
| Common Mode       | 4KV  |

## 10. Dimensions

| Category                | Data                                         |
|-------------------------|----------------------------------------------|
| Naked Machine           | 270mm*180mm*45mm<br>(equipped with ear hook) |
| Whole Machine           | 310mm*244mm*77mm                             |
| Whole Box(10PCS/carton) | 515mm*415mm*335mm                            |

## 11. Packing、Transportation、Storage

| Packing Contents  | Data                                                                                                                                   |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Filled Protection | Left and right pearl cotton sets, fully wrapped for protection.                                                                        |
| Packing Box       | Premium cow card cardboard box,<br>sized 515mm*415mm*335mm.                                                                            |
| Packing Number    | 10 PCS                                                                                                                                 |
| 2D Code           | The packaging box and the equipment body should have a<br>unique equipment SN (sequence number) number                                 |
| Others            | The packing box should have labels indicating the product<br>model codes and quantity, This model can be compatible with<br>rack ears. |

**Transport Requirement:** Domestic designated express logistics can transport the whole box, and it is suitable for transportation by car, ship and plane. During transportation, it should be covered, sun-proof, and loaded and unloaded in a civilized manner.

### Store Requirement:

| Index                   | Requirements                                                                                                                                                                                          |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Humidity Environment    | 5% to 90% RH (relative humidity) without condensation                                                                                                                                                 |
| Temperature Environment | -40°C to 70°C, considering in combination with the humidity, the most reasonable state is recommended to be the room temperature condition                                                            |
| Stacking Limit          | In the complete packaging state, the maximum upper limit is 4 layers.                                                                                                                                 |
| Points For Attention    | Storage warehouses should be clean, ventilated, free of corrosive gases, free of flammable, explosive and other corrosive chemicals, and away from heat sources, strong mechanical vibration sources. |
| Storage Cycle           | According to the above requirements, reasonable storage can last for one year, and it is recommended to re-examine and use again after two years.                                                     |