DATASHEET

ON-S0008EP-2G

8 Port Fast Ethernet PoE Switch

ON-S0008EP-2G

Features

8-Port 10/100Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)

Comply with IEEE802.3, IEEE802.3u, IEEE802.3af/at standards Support IEEE802.3x full-duplex flow control; support Auto MDI/MDIX
8-Port support 48V-56VDC power to PoE-powered devices
PSE devices provide up to 15.4W or 30W of power
PD devices receive up to 12.95W or 25.5W accordingly
120-watts PoE budget
Built-in 53V /1.85A switching power supply
Extra 2-Port 10/100/1000Mbps UPLINK RJ-45
PoE data & power transmission distance up to 100meters
Port based VLAN for Enhancing Security
Backplane Bandwidth: 5.6Gbps
Excellent anti-thunder, anti-static and anti-interference ability Surge Protection: 4KV
Easy and convenient to use, plug & play, no need to configure Galvanized housing for stable and durable working life

Overview

The ON-S0008EP-2G provides 8-port 10/100Mbps IEEE 802.3af/at Power over Ethernet with a total of 120 wa s of PoE budget, which is an ideal solu on to fulfill the demand of sufficient PoE power for network applica ons. It can power up to 8 IEEE 802.3af/at compliant devices.

The ON-S0008EP-2G is an ideal solu on for securing IP surveillance infrastructure. It provides both 802.3af/at PoE func ons along with 8 x 10/100Base-TX ports featuring 15.4-wa 802.3af/30-wa 802.3at PoE in RJ-45 interfaces and extra 2 x 10/100/1000Mbps UPLINK RJ-45 ports to keep a cascade connec on with another switch or NVR. For instance, one 8-Port PoE Switch can be combined with one 8-Channel NVR and eight PoE IP cameras as a kit for the administrators to centrally and efficiently manage the surveillance system in the local LAN and the remote site via Internet.

The ON-S0008EP-2G RJ-45 interfaces support 10/100Mbps Auto-Nego a on at downlink port from 1 to 8 and 10/100/1000Mbps uplink port from 1 to 2 for op mal speed detec on through RJ-45 Category 6, 5e or 5 cables. It also supports standard Auto-MDI/MDI-X that can detect the type of connec on to any Ethernet device without requiring special straight or crossover cables.

The ON-S0008EP-2G supports port-based VLAN func on, which effec vely prevent the whole system from internet broadcast storm to make the data transfer much safer. When the VLAN mode is enabled, the data cannot be forwarded among Downlink RJ-45 ports, but Downlink ports and UPLINK RJ-45 ports can communicate with each other. The bandwidth of DOWNLINK RJ-45 port is forced to 10Mbps mode to adapt to long distance transmission of max 250meters. The bandwidth of UPLINK RJ-45 port is s ll 1000Mbps.

With data and power over Ethernet formed one unit, the ON-S0008EP-2G reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installa on costs, simplify the installa on effort and eliminate the need for electricians or extension cords. Providing 8 PoE interfaces, the ON-S0008EP-2G is ideal for small businesses and workgroups requiring deploying the PoE for the wireless access points, IP-based surveillance IP phones in any place easily, efficiently and cost-effec vely.

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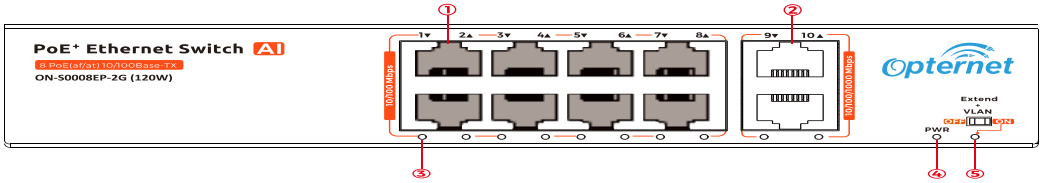
Products Panel Figure

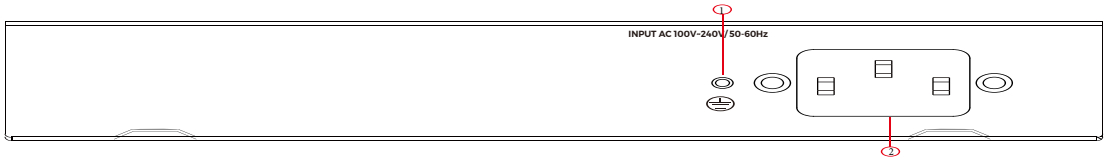
Front panel



① Downlink Port: Transfer data from other IP devices to the switch
② Uplink Port: Transfer data from PoE ports to other devices (NVR/Switch/ADSL)

No.	LED light type	Light color	State	Descriptions
③	Link/ Act Indicator	Green	Light on	Indicates that this port is connected
			Blinks	Indicates that this port is sending/receiving Ethernet frames
			Light off	Indicates that this port is disconnected
④	Power Indicator	Green	Light on	Power on
			Light off	Power off
⑤	VLAN Indicator	Green	Light on	VLAN and extension mode starts
			Light off	VLAN and extension function stops

Rear panel



① Ground Connection
② Input: AC 100~240V

Package Contents

1) ON-S0008EP-2G: 1pc

2) Manual: 1pc

3) AC cable:1pc

Step 1: Begin with all input/output devices turned off and power cables are removed. Step 2: Connect RJ-45 port of PoE cameras with Downlink port of PoE switches over
standard Cat 5e/6 cables.
Step 3: Connect Uplink port of PoE switches with RJ-45 port of NVR or computer or
other devices over standard Cat 5e/6 cables.
Step 4: Connect AC power cable with PoE switches.
Step 5: Make sure above connections are properly finished, then turn on the power.

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AI Watchdog Function Introduction

PoE webcam is 24 hours of continuous work, when the PoE camera crashes abnormally, or does not communicate, it needs to be manually checked on the spot and manually restarted. But with our intelligent watchdog function, there is no need for personnel to go to the scene to view when the PoE switch can not receive the network data packets of the camera, it will start timing when the cumulative time exceeds three minutes, the camera will be automatically powered off and restarted, to achieve the purpose of remote intelligent monitoring.

VLAN Introduction

At present, applications of Ethernet switches are very wide. To satisfy the needs of various customers, it is urgent for network services to solve the problems such as broadcast domains, bandwidth and security, thus, a new technology called VLAN has emerged.

Each Downlink RJ-45 port and Uplink RJ-45 port form a separate workstation respectively. In the same VLAN workstation, regardless of which switch they are actually connected to, the communication between them is as if they were on a separate switch. Broadcasts in the same VLAN can only be heard by members of the VLAN, preventing unwanted broadcast.
At the same time, if there is no routing, different VLANs cannot communicate with each other, enhancing the security of different departments in the enterprise network.

When the VLAN mode is enabled, the data cannot be forwarded among Downlink RJ-45 ports, but Downlink ports and UPLINK RJ-45 port can communicate with each other. The bandwidth of Downlink RJ-45 port is forced to 10Mbps mode to adapt to long- distance transmission of max 250 meters. The bandwidth of UPLINK RJ-45 port is 1000Mbps, which keeps a cascade connection with another switch or NVR.

Note:

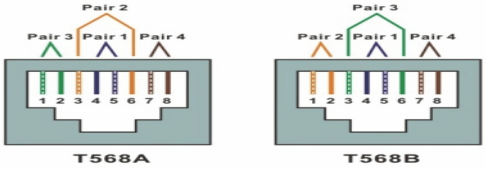
1. After you turn on the VLAN button, please press the reset button or reboot the device, then VLAN mode is enabled.
2. The maximum extended distance is up to 250 meters.
   The actual extended distance will vary according to the quality of the cable, specific camera and on-site environment.

How to make a network cable

To create a network cable, you will first need the equipments listed below.

1. Cat5e, Cat6, or Cat7 cable
2. RJ-45 connectors
3. Crimping tool
4. Wire stripper or knife

The wire sequence of RJ45 connector must comply with the interna onal standards of EIA/TIA 568A or EIA/TIA 568B.



	1	2	3	4	5	6	7	8
T568A	White Green	Green	White Orange	Blue	White Blue	Orange	White Brown	Brown
T568B	White Orange	Orange	White Green	Blue	White Blue	Green	White Brown	Brown

1) We recommend stripping at least half of an inch off of the cable to expose the inner wires.
2) Separate the wires within the cable after the network cable jacket has been removed so that they can be put into the RJ-45 connector.
3) The CAT5 twisted-pair cable consists of four twisted wires, each color-coded; 8 wires must be correctly lined as the standards of EIA/TIA 568A or EIA/TIA 568B.
4) Cut thread residue and leave 1.5cm wire exposed outside the insulating layer and ensure 8 wires are straightened and neat.
5) Place the cable into the RJ-45 connector and then use the crimping tool to attach the connector.
6) Repeat the above steps for the other end of the cable; the wire sequence of both ends of the cable is suggested to be identical.
7) Make sure to test the cables before installing them once both ends of the cable have been completed.

Note:

1. All RJ-45 Ports of this device support Auto MDI/MDIX, so the different wire sequence of both ends of the cable is allowed.
2. Up to two units can be cascaded.

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Technical Specifications

Model	ON-S0008EP-2G
Product Name	8-Port 10/100Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)
Power Supply	
Power Supply Mode	AC Power Supply
Voltage Range	AC100~240V
Power Consumption	The device <5W PoE power supply ≤120W
Network Port Parameter	
Network Port	Ethernet Downlink RJ-45 Port: 8*10/100Mbps Uplink RJ-45 Port: 2*10/100/1000Mbps
Transmission Distance	1~8 Ethernet Downlink RJ-45 Port: 100m Mandatory 10 Mbps reach up to 250m Uplink RJ-45 Port: 100m
Transmission Medium	1~8 Ethernet Downlink RJ-45 Port: Cat5e/6 standard cable Uplink RJ-45 Port: Cat5e/6 standard cable
PoE Standards	IEEE802.3af/at
PoE Power Supply Mode	End-span method
PoE Power Supply Wattage	Each port ≤30W Whole device≤120W
Network Switch Specification	
Network Standards	IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX/FX, IEEE802.3az
Swap Mode	Store-and- forward
Data-Caching Mechanism	1M
MAC Address List	4K
Backplane Bandwidth	5.6Gbps
Forwarding Capacity	4.16Mpps
Indicator/Button	
Power Indicator	Green LED on: power on
Uplink Port	Green LED on: link up, off: link down, blinks: data transferring
PoE Network Port Indicator	1~8 port indicators blink while data transferring
VLAN Button	Turn on VLAN button: VLAN and extension function starts Turn off VLAN button: VLAN and extension function stops
Protection Level	
Surge Protection	4KV (common mode),10/700us IEC61000-4-5 500V (differential mode),10/700us IEC610000-4-5
Electrostatic Protection	Contact Discharge: ±4KV Air Discharge: ±6KV Standard: IEC61000-4-2
Reliability	
Mean time between failures	>50000h
Mechanical	
Dimensions (L*W*H)	200mmx118mmx45mm
Housing	Galvanized
Body Color	Black
Net Weight	790g
Environmental	
Operating Temperature	55℃ 0℃
Storage Temperature	85℃40℃
Relative Humidity	0~95% (non-condensing)

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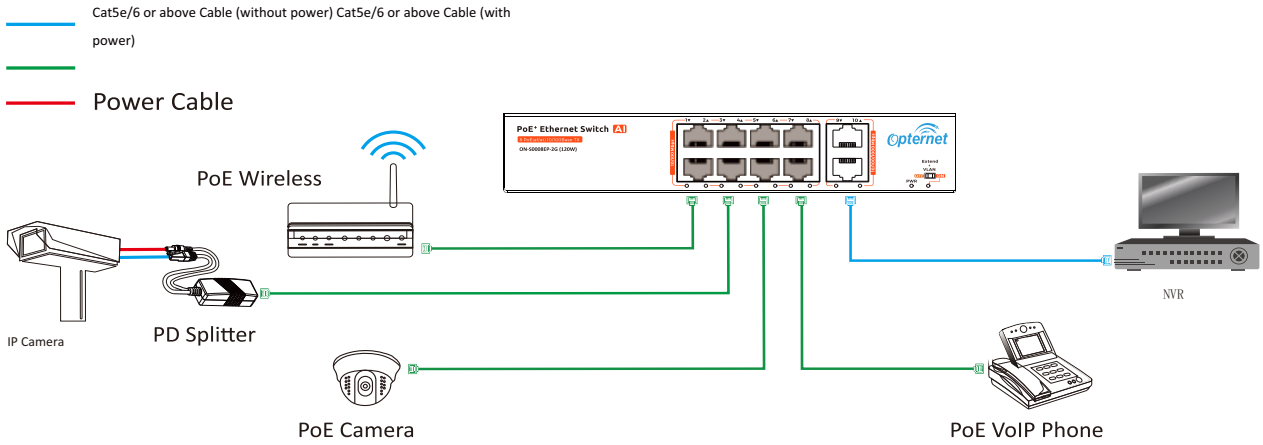
■ Application Diagram



■ After-sales Service

For breakdown caused by product quality, we guarantee product return within 15 days, exchange within 30 days and free warranty within 1 year. The guarantee period counts from the date of purchase.