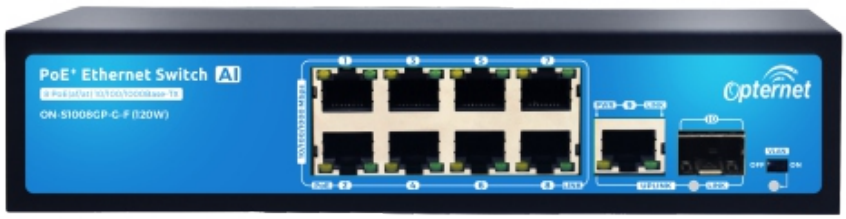
DATASHEET

# ON-S1008GP-G-F
## 8 Port Giga PoE Switch




**ON-S1008GP-G-F**

## Features

**8-Port 10/100/1000Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)**

- Comply with IEEE802.3, IEEE802.3u, IEEE802.3ab, 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 15.4W or 30W power to powered devices
- 120-watt PoE budget
- Built-in 53V/2.1A switching power supply
- Extra 1-Port 10/100/1000Mbps UPLINK RJ-45 and 1-port 1000Base-X SFP
- 121-PoE data & power transmission distance up to 100m
- Port based VLAN for Enhancing Security
- Backplane Bandwidth: 20Gbps
- 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-S1008GP-G-F provides 8-Port 10/100/1000Mbps 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 is able to drive 8 IEEE 802.3af/at compliant powered devices.

The ON-S1008GP-G-F is an ideal solu on for securing IP surveillance infrastructure. It provides both 802.3af/at PoE func ons along with 8 x 10/100/1000Base-TX ports featuring 15.4-wa 802.3af/30-wa 802.3at PoE in RJ-45 interfaces and extra 1 x 10/100/1000Mbps UPLINK RJ-45 port and 1 x 1000Base-X SFP port to keep a cascade connec on with another switch or NVR. For instance, one ON-S1008GP-G-F 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-S1008GP-G-F RJ-45 interfaces support 10/100/1000Mbps Auto-Nego a on at downlink port from 1 to 8 and uplink port from 1 to 2 for op mal speed detec on through RJ-45 Category 6, 5e or 5 cables and fiber cable. 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-S1008GP-G-F supports port-based VLAN func on, which effec vely prevent the whole system from internet broadcast storms 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 ports can communicate with each other. The bandwidth of RJ-45 port remains at 100/1000Mbps.

With data and power over Ethernet formed one unit, the ON-S1008GP-G-F 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 efforts and eliminate the need for electricians or extension cords. Providing 8 PoE interfaces, the ON-S1008GP-G-F is ideal for small businesses and work-groups which requiring PoE deployment for the wireless access points and IP-based surveillance IP phones in any place easily, efficiently and cost-effec vely.

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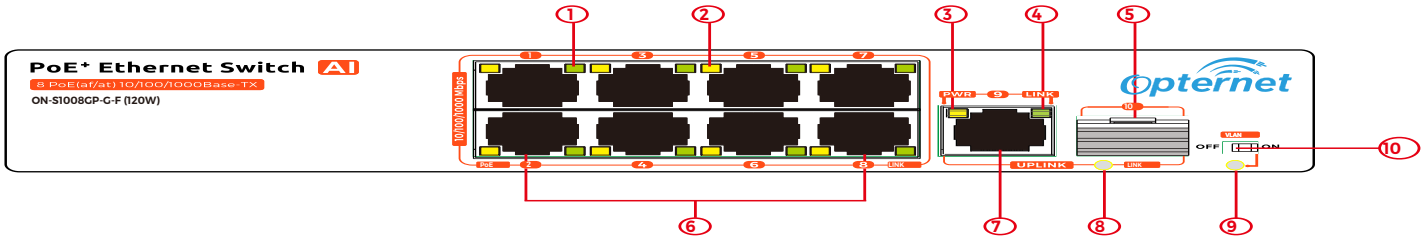
## Products Panel Figure

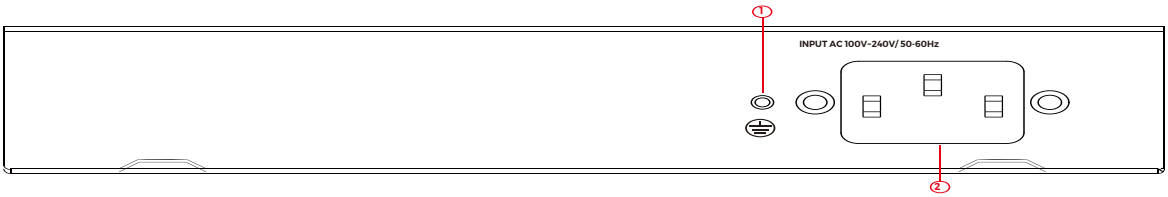
**Front panel**




| NO. | Type | Light color | State | Descriptions |
|---|---|---|---|---|
| ① | Downlink Port Indicator | Green | Light on | Link up |
| | | | Blinks | Data transfer |
| | | | Light off | Link down |
| ② | PoE Indicator | Yellow | Light on | power on |
| | | | Light off | power off |
| ③ | Power Indicator | Yellow | Light on | power on |
| | | | Light off | power off |
| ④ | Uplink RJ45 Port Indicator | Green | Light on | Link up |
| | | | Blinks | Data transfer |
| | | | Light off | Link down |
| ⑧ | Uplink SFP port Indicator | Green | Light on | Link up |
| | | | Blinks | Data transfer |
| | | | Light off | Link down |
| ⑨ | VLAN Indicator | Green | Light on | VLAN mode |
| | | | Light off | Normal model |
| ⑩ | VLAN Switch | / | On | VLAN function start |
| | | | Off | Normal mode |

Uplink Port: Transfer data from other IP devices to the switch
Downlink RJ45 Port: Transfer data from PoE ports to other devices (NVR/Switch/ADSL)
Uplink SFP Port: Transfer data from PoE ports to other remote devices according to fiber (NVR/Switch/ADSL)

**Rear panel**




① Ground Connection

② Input: AC 100~240V

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## Quick Setup Guide

### Package Contents

1) ON-S1008GP-G-F: 1pc

2) anual: 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.

## 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 and SFP port can communicate with each other.

**Note:**
After you turn on the VLAN button, please press the reset button or reboot the device, then VLAN mode is enabled.

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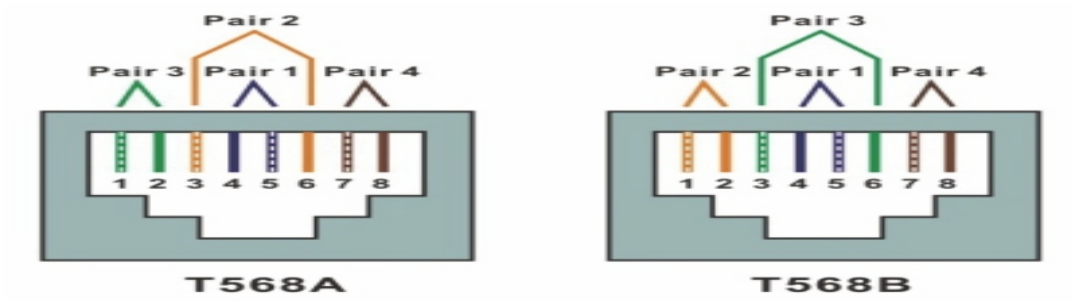
## How to make a network cable

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-S1008GP-G-F |
| Product Name | 8-Port 10/100/1000Mbps 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*10/100/1000Mbps<br>Uplink Port: 1*RJ45 10/100/1000Mbps and 1*SFP 1000Base-X |
| Transmission Distance | 1~8 Ethernet Downlink RJ-45 Port: 100m<br>Uplink RJ-45 Port: 100m SFP Port: Maximum 120Km |
| Transmission Medium | 1~8 Ethernet Downlink RJ-45 Port: Cat5e/6 standard cable Uplink Port: Cat5e/6 standard cable and Fiber |
| PoE Standards | IEEE802.3af/at |
| PoE Power Supply Mode | End-span |
| 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,IEEE802.3ab |
| Swap Mode | Store-and-forward |
| Data-Caching Mechanism | 2Mb |
| MAC Address List | 4K |
| Backplane Bandwidth | 20Gbps |
| Jumbo Frame | 9K |
| Forwarding Capacity | 14.88Mpps |
| **Protection Level** | |
| Surge Protection | 4KV (common mode), 10/700us IEC61000-4-5 |
| 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 | 0~55℃ |
| Storage Temperature | -40~85℃ |
| Relative Humidity | 0~95% (non-condensing) |

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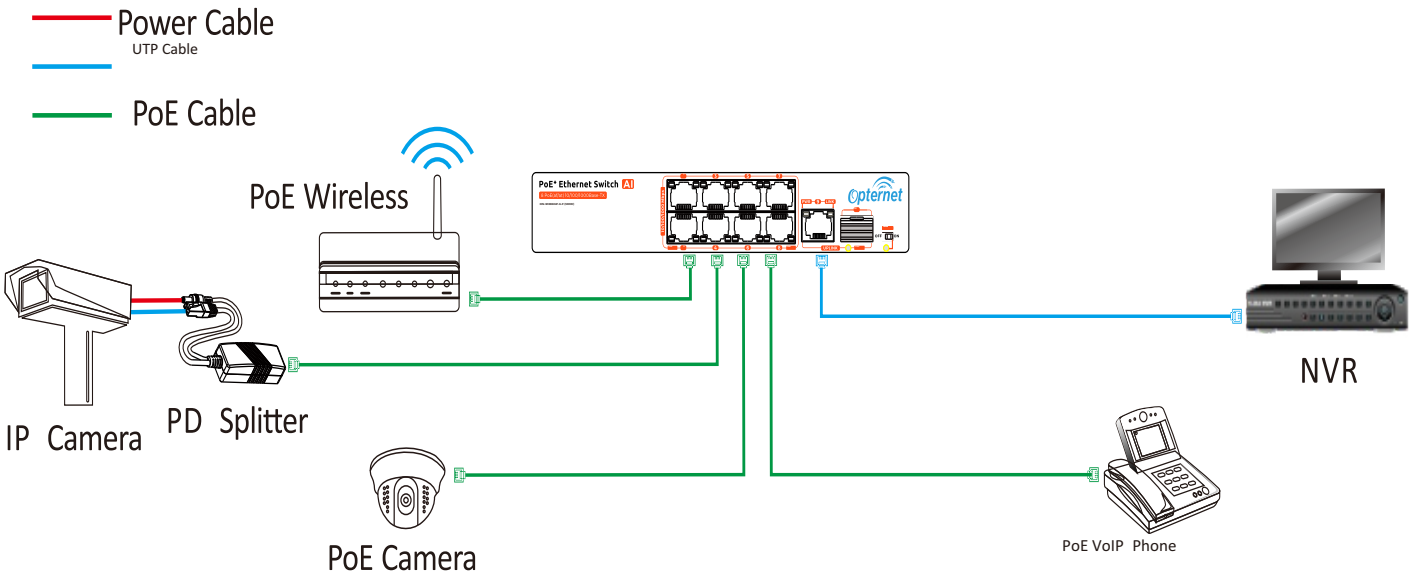
## ■ Application Diagram




## ■ 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.