# USER GUIDE

**ONV** PoE & Optical Transmission

## **Product Overview**

#### **Product Introduction**

ONV-IPS33148PFM series has 8x Rj45 Ethernet ports that compliant with 10/100/1000BaseT, 802.3af ( PoE) and 802.3at(PoE+), 2x gigabit RJ45&SFP combo ports, and 4x gigabit SFP ports. This switch can offer power over Ethernet to network weatherproof IP camera with wipers and heater, high performance wireless AP, industrial VoIP phone or other PoE supported equipments, flexible for applications. SFP fiber optic port transmission distance can be up to 120KM, with high resistance to electromagnetic interference. Besides, it supports enhanced management through WEB, CLI, TELNET, SSH, SMMP.

In short, this industrial PoE switch provide better manageability, security, QoS, and performance.

## **▲** Note

The product 'Switch' mentioned in the manual, if without a special request, it is referring to industrial ONV-IPS33148PFM PoE switch, PoE switch in short in below.

#### Feature

- > 10-Port 10/100/1000Base-T + 4 (100M/1G) SFP L2 Plus Managed POE+ Switch
- > L2+ features provide better manageability, security, QoS, and performance
- Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, POE+ management, IP Source Guard, ARP inspection, ACLs etc.
- Support spanning tree STP(802.1D) and RSTP(802.1W)
- Jumbo frames support up to 9.6K kilobytes
- Support enhanced management through WEB, CLI, TELNET, SSH, SNMP.
- Support cable diagnosis
- Supports both IEEE 802.3af and 802.3at, and every port PoE configuration function
- G.8032, support <50ms industrial quick ring protection</p>

## Statement

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#### **Packing List**

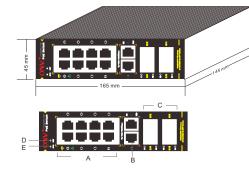
Please kindly check the following items:

- > 1 x Industrial PoE switch
- Power Kits (Need to order it separately)
- Mounting Kits
- > 1x User Guide/ Certificates/Warranty Card

### ▲ Note

If any shortage or damage found, please contact us in time.

# Technical Structure and Port Description



A. PoE Ports C. Gigabit SFP Uplink B. Gigabit Rj45 Uplink D. Reset E. System Working Indicator

# **Panel Description**

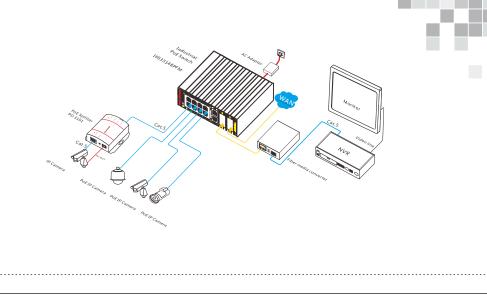
| Indicator            | Status           | Description  |
|----------------------|------------------|--|
| Power Indicator: SYS | Green LED ON     | Normal   |
|                      | Green LED OFF    | Power OFF  |
| PoE Indicator: PoE   | Green LED ON     | Connected PD device, working properly                      |
|                      | Green LED Blink  | Short circuit or current overload                          |
|                      | Green LED OFF    | No connected PD or power OFF                               |
| Link Indicator: Link | Yellow LED ON    | Data transmission properly                                 |
|                      | Yellow LED Blink | Connection is OK and data is being sent and received       |
|                      | Yellow LED OFF   | No data connected  |
| SFP Uplink Indicator | White LED ON     | Data transmission properly                                 |
|                      | White LED Blink  | Connection is OK and data is being sent and received       |
|                      | White LED OFF    | No data connected  |
| Gigabit RJ45 Uplink  | Yellow LED ON    | 100M data transmission properly                            |
|                      | Yellow LED Blink | Connection is OK and 100M data is being sent and received  |
|                      | Yellow LED OFF   | No data connected  |
|                      | Green LED ON     | 1000M data transmission properly                           |
|                      | Green LED Blink  | Connection is OK and 1000M data is being sent and received |
|                      | Green LED OFF    | No data connected  |

▲ Note : Please confirm that the all PoE ports of PD devices are complying with IEEE802.3af/at standard. Power Industrial Terminals: 48 (46 ~57V)VDC, dual redundancy (More than 50VDC recommended when used PoE+ output), please use AC110~245V, 50/60Hz power supply;

**PoE Port**: The PoE ports support PoE function, which can transmit data and power simultaneously if connected matching device. The LED lights on the front panel can show working status of each port.

Ethernet Port: Besides PoE ports, other ports are normal self-sensing Ethernet RJ45 ports which support Auto MDI/MDIX, plug and play. The LED lights on the front panel can show working status of each port.

# Application Connection Diagram



## Installation Guide

#### Please install to the supported devices.

#### Installation

Please confirm the following things before installation:

- 1. If the POE port meets the power requirement of the connecting devices.
- 2. If the POE standard requirement and power supply matches with the power receiving device
- (1/2+、3/6-( End -span)/4/5+、7/8-(Mid-span))
- 3. If the output power of the matched power adapter is compatible with the specification in the label of the POE switch

Please install the POE switch according to the following steps:

- 1. Put the PoE switch on the surface of a large and stable table, or professional industrial installation rank mount.
- 2. Connect Positive, Minus and Earth terminals as indicators on the power adapter.
- 3. Connect the network devices to the POE switch port though network cable.

## **▲** Note

1.Please do not put heavy products on the POE switch, and please ensure good ventilation environment for the POE switch. 2.Please cut off the power first before plugging the power adapter.

#### Power

Connect the power cable, plug it into power socket, turn on the power, then the switch will automatically initialize, and LED lights status will display as following: 1 Except the POE port lights, all the other lights will go through the process of "on-off-on-off", which means the system restoration is successful.

2 Power LED remains lit.

#### ▲ Note

If initialization is inconsistent with the above, please check the power.

## **Models Description**

**ONV-IPS33148PFM:** Industrial managed PoE switch, support SNMP web manage protocol, 35mm rail-type installation. 8x 10/100/1000M RJ45 PoE ports+2x 10/100/1000M RJ45 ports+2x 100/1000M SFP ports, 8 PoE ports comply with both IEEE 802.3af/IEEE 802.3at, auto-detect af/at devices. Max PoE port power is 30W. Rj45 ports transmission distance is 100 meters, transmission distance of optic fiber port with SFP module can be up to 2-120KM. Power adapter and SFP module is not included in this package, please order separately.

Tel:+86-755-33376606 Fax:+86-755-33376608 Email:onv@onv.com.cn Address: Room 1003, Block D , Terra building , Chegongmiao, Futian district ,Shenzhen ,China Factory address:No 5, A building, SenYuTai S&T park, Longhua road, BaoAn district,Shenzhen, China WWW.ONVCOM.COM