

## Product Datasheet

# 5-port 10/100M Industrial bt PoE Switch

(ONV-IPS31004PF-bt)



## OVERVIEW

The ONV-IPS31004PF-bt is a 10/100M industrial bt PoE switch independently developed by ONV. It has 4\*10/100Base-TX adaptive RJ45 ports and 1\*155M uplink SC fiber ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard and single-port max output power is 90W. As a PoE power supply device, it can automatically detect and recognize the power-receiving equipment that meets the standard and supply power through the network cable. It provides stable and safe terminals for PTZ network domes, high-power wireless AP, high-power network multimedia speakers, and high-power POE lighting, etc. through a network cable to meet the network environment that needs high-density PoE power supply. It is suitable for intelligent transportation, rail transit, electric power, mining, metallurgy and green energy. Industrial scenes such as construction set up a cost-effective and stable communication network. Unmanaged mode, plug and play, no configuration, easy to use.

## FEATURE

### ■ 10/100M access

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- ◇ Support 100M RJ45 port and SC fiber port combination, allowing users to flexibly network to meet networking needs in various scenarios.

### ■ Smart PoE power supply

- ◇ 4\*10/100Base-TX RJ45 ports support bt PoE power supply, meeting the needs of high-power PoE power supply in the industrial field.
- ◇ Priority system for PoE port, It will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- ◇ The max output power of single-port PoE is 90W and the backward compatibility IEEE 802.3 af/at PoE standard automatically identifies PoE devices for power supply without damaging non-PoE devices.

### ■ Stable and reliable

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link, and PoE.
- ◇ Low power consumption, aluminum alloy housing, and excellent heat dissipation to ensure the stable operation of the switch.

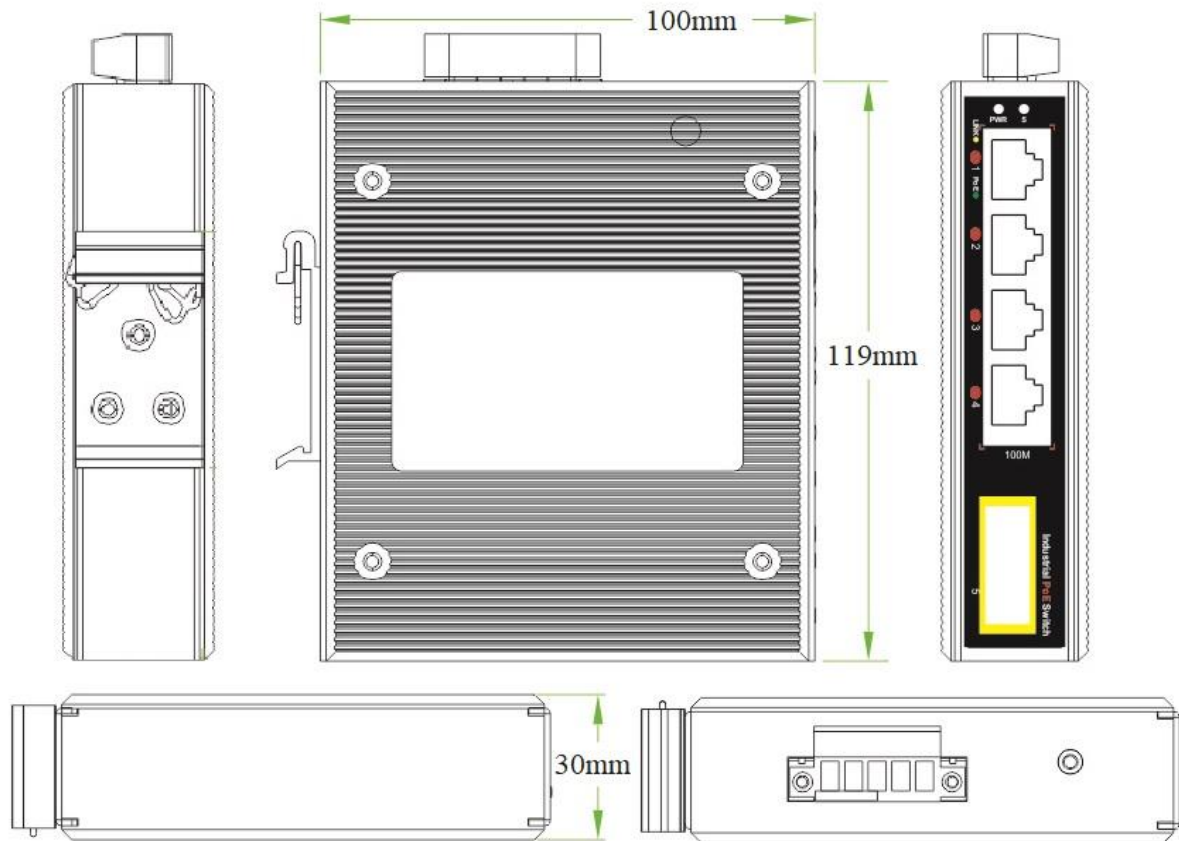
## TECHNICAL SPECIFICATION

Model	ONV-IPS31004PF-bt
<b>Interface Characteristics</b>	
Fixed Port	1*155M uplink SC fiber port (Data) 4*10/100Base-TX bt PoE ports (Data /Power) 2 set V+, V- redundant DC power ports (5P industrial Phoenix terminal)

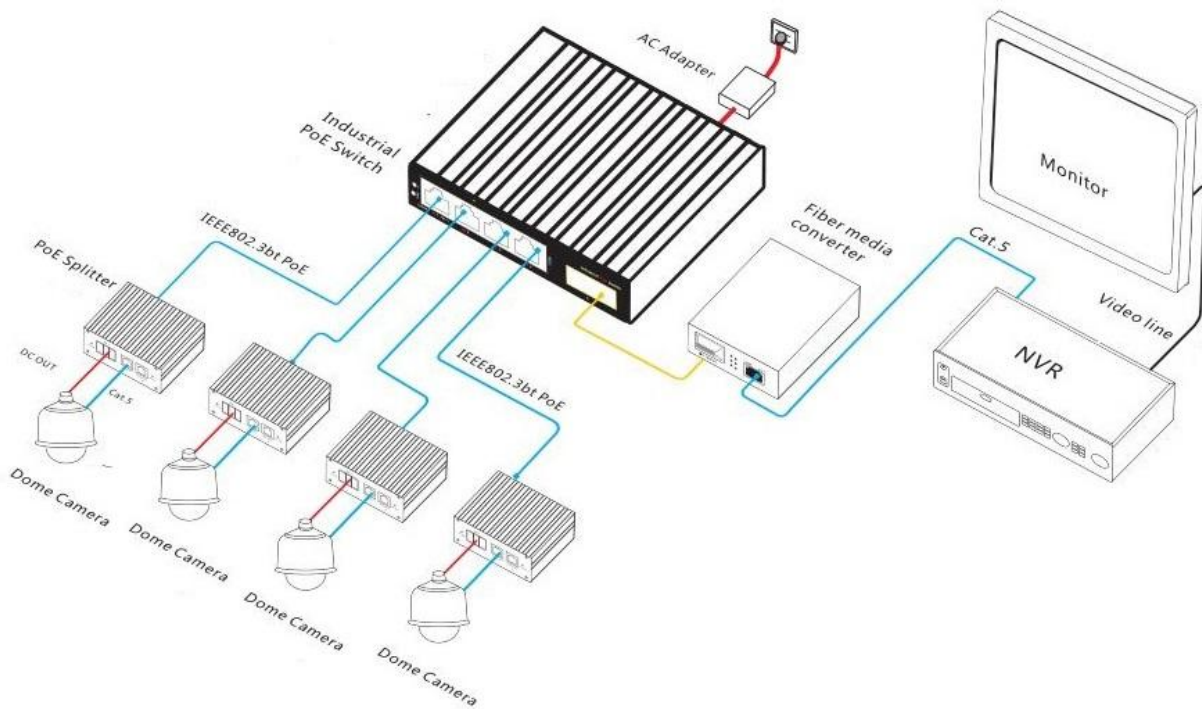
Ethernet Port	Port 1-4 can support 10/100Base-TX auto-sensing, full/ half duplex MDI/ MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters)
Optical Fiber Port	Optical module is single-mode dual fiber 20km, SC port. (optional single-mode single fiber and multi-mode dual fiber optical module)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500m, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km
<b>Chip Parameter</b>	
Network Protocol	IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3u 100Base-FX, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	1.0Gbps (non-blocking)
Forwarding Rate@64byte	0.74Mpps
MAC	1K
Buffer Memory	512K
Jumbo Frames	9.2K
LED Indicator	Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: 5 (Green)
<b>PoE &amp; Power Supply</b>	
PoE Port	Port 1-4
Power Supply Pin	1/2(+)/3/6 (-) 4/5(+)/7/8 (-)
Max Power Per Port	90W, IEEE 802.3 af/at/bt
Power Consumption	Standby<4W, Full Load<240W
Input Voltage/ Interface	DC48-57V, 5P industrial Phoenix terminal, supports anti-reverse protection.
Power Supply	No, optional 48V/240W industrial power supply
<b>Physical Parameter</b>	
Operation Temp/ Humidity	-40~+75°C, 5%~90% RH Non-condensing
Storage Temp/ Humidity	-40~+85°C, 5%~95% RH Non-condensing

Dimension (L*W*H)	119*100*30mm
Net /Gross Weight	0.4kg /0.5kg
Installation	Desktop, 35mm DIN Rail
<b>Certification &amp; Warranty</b>	
Lightning Protection	<p>Protection level: IP40</p> <p>Lightning protection: 6KV 8/20us</p> <p>IEC61000-4-3 (RS):10V/m (80~1000MHz)</p> <p>FCC Part 15/CISPR22 (EN55022): Class A</p> <p>IEC61000-6-2 (Common Industrial Standard)</p> <p>IEC61000-4-9 (Pulsed magnet field): 1000A/m</p> <p>IEC61000-4-10 (Damped oscillation): 30A/m 1MHz</p> <p>IEC61000-4-12/18 (Shockwave): CM 2.5kV, DM 1kV</p> <p>IEC61000-4-4(EFT): Power cable: ±4kV, data cable: ±2kV</p> <p>IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s</p> <p>IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge</p> <p>IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz)</p> <p>IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s</p> <p>IEC61000-4-5 (Surge): Power cable: CM±4kV/ DM±2kV, data cable: ±4kV</p>
Mechanical Properties	<p>IEC60068-2-6 (Anti Vibration), IEC60068-2-27 (Anti Shock),</p> <p>IEC60068-2-32 (Free Fall)</p>
Certification	<p>CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A,</p> <p>RoHS</p>
Warranty	5 years, lifelong maintenance.

## DIMENSION



## APPLICATION



## ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS31004PF-bt	Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm/20km single-mode dual fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	240W
ONV-IPS31004PF-M-bt	Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (850nm/0.5km or 1310nm/2km multi-mode dual fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	240W
ONV-IPS31004PF-A-bt	Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm/20km single-mode single fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	240W
ONV-IPS31004PF-B-bt	Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1550nm/20km single-mode single fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	240W

**Note:** The power supply is not included and needs to be purchased.

## PACKING LIST

Packing List	Content	Qty	Unit
	5-port 10/100M industrial bt PoE switch	1	Set
	User Guide	1	PC
	Warranty Card	1	PC

## POWER SUPPLY

Product	Model	Description	Unit
120W DIN Rail Industrial Power Supply	GWS-DP120-48	DIN Rail 120W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 2.3A Output Voltage: DC48V, 2.5A Operation Temperature: -40°C to +70°C	PC
240W DIN Rail Industrial Power Supply	GWS-DP240-48	DIN Rail 240W single set of output power supply Input Voltage: AC 100V~240V 50-60Hz, 3.0A Output Voltage: DC48V, 5.0A Operation Temperature: -40°C to +70°C	PC
480W DIN Rail Industrial Power Supply	GWS-DP480-48	DIN Rail 480W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 5.0A Output Voltage: DC48V, 10A Operation Temperature: -40°C to +70°C	PC

## RELATED PRODUCT

Model	Description
ONV-IPS31064P-bt	Unmanaged industrial bt PoE switch with 6*10/100M RJ45 ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.

ONV-IPS33064P-bt	Unmanaged industrial bt PoE switch with 6*10/100/1000M RJ45 ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.
ONV-IPS33064PF-bt	Unmanaged industrial bt PoE switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.
ONV-IPS33064PFG-bt	Unmanaged industrial bt PoE fiber switch with 4*10/100/1000M RJ45 ports and 1*10/100/1000M RJ45 port and 1*1000M uplink SFP fiber port. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.
ONV-IPS33064PFM-bt	L2+ managed industrial bt PoE fiber switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.
ONV-IPS57128PFM-bt	L2+ managed industrial bt PoE fiber switch with 8*10/100/1000/2500M RJ45 ports and 4*1/10G uplink SFP+ fiber ports. Port 1-8 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.

## CONTACT US



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