Product Datasheet

10-port Full Gigabit Industrial Ethernet Switch

(ONV-IPS3108)

OVERVIEW

The ONV-IPS3108 is a gigabit industrial Ethernet switch independently developed by ONV. It is designed to meet industrial fields and systems and can operate stably for a long time in harsh environments. It has 10*10/100/1000M RJ45 ports. Each port can support full line-rate forwarding. The ONV-IPS3108 Ethernet switch has excellent industrial field environment adaptability (including mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.). The protection level is IP30, It can support dual redundant power supply, low power consumption, and no fan. 5-year warranty. It is suitable for industrial scenes such as intelligent transportation, rail transit, electric power, mining, metallurgy, and green energy construction to form a cost-effective and stable communication network.

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FEATURE

■ Gigabit wire speed forwarding

◇ Support non-blocking wire-speed forwarding.

◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.

◇ Support gigabit RJ45 port and dual uplink RJ45 port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ Stable and reliable

◇ CCC, CE, FCC, RoHS.

◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link.

◇ Low power consumption, no fan, aluminum shell, excellent heat dissipation to ensure the stable operation of the switch.
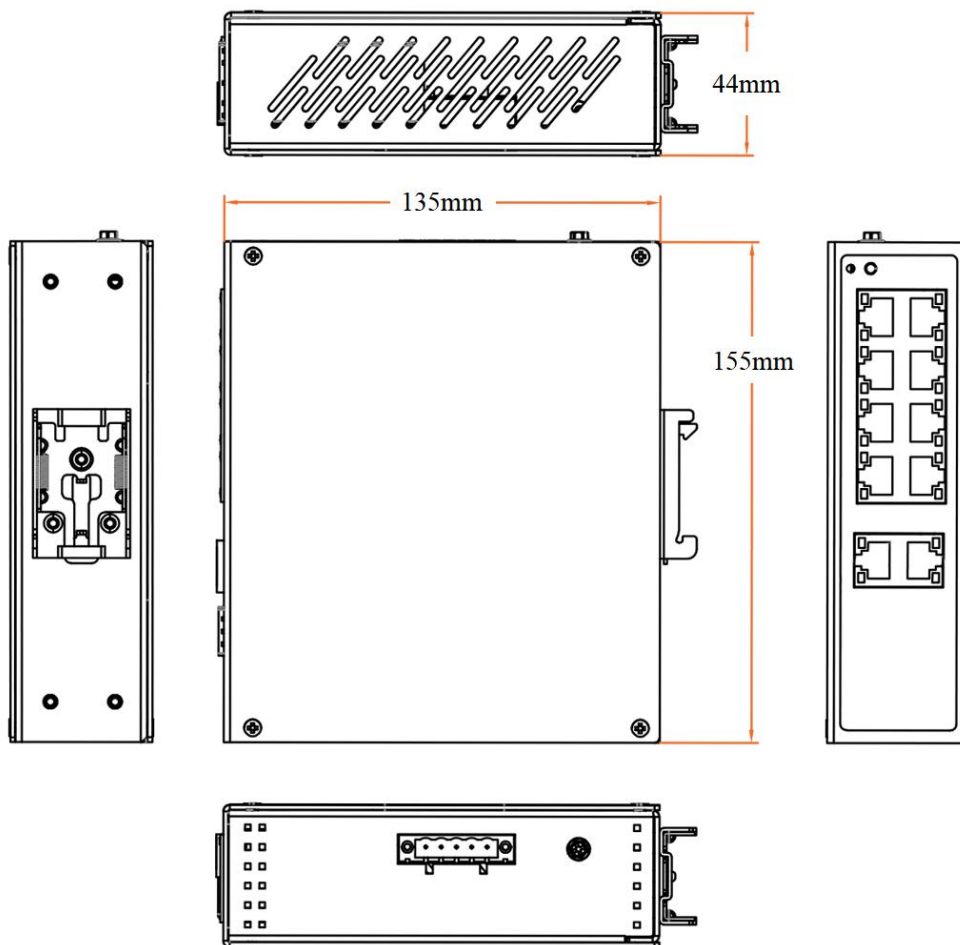
TECHNICAL SPECIFICATION

Model	ONV-IPS3108
Interface Characteristics	
Fixed Port	10*10/100/1000Base-T RJ45 ports (Data) 2 set of V+, V- redundant DC power ports (5P Phoenix terminal)
Ethernet Port	Port 1-10 support 10/100/1000Base-T(X) 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) 1000BASE-T: Cat5e or later UTP(≤100 meters)
Chip Parameter	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX , IEEE802.3u 1000Base-T, IEEE802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	20Gbps

Forwarding Rate @64byte	14.88Mpps
MAC	
Buffer Memory	4Mb
Jumbo Frame	9.2KB
LED Indicator	Power: PWR (Green), Network: Link G1-G10 (Yellow)
Power Supply	
Working Voltage	DC12-48V, 5P industrial phoenix terminal, support anti-reverse protection
Power Consumption	Standby<6W, Full load<8W
Power Supply	No, optional 24V/24W industrial power supply
Physical Parameter	
Operation TEMP/ Humidity	-40°C~+75°C, 5%~90% RH Non condensing
Storage TEMP/ Humidity	-40°C~+85°C, 5%~95% RH Non condensing
Dimension (L*W*H)	155*135*44mm
Net /Gross Weight	<0.6kg / <0.8kg
Installation	Desktop, DIN rail
Certification & Warranty	
Lightning Protection	Protection level: IP30

Lightning protection: 6KV 8/20us

IEC61000-4-3 (RS):10V/m (80~1000MHz)

FCC Part 15/CISPR22 (EN55022): Class B

IEC61000-6-2 (Common Industrial Standard)

IEC61000-4-9 (Pulsed magnet field):1000A/m

IEC61000-4-10 (Damped oscillation): 30A/m, 1MHz

IEC61000-4-12/18 (Shockwave): CM 2.5kV, DM 1kV

IEC61000-4-4(EFT): Power cable:±4kV, Data cable: ±2kV

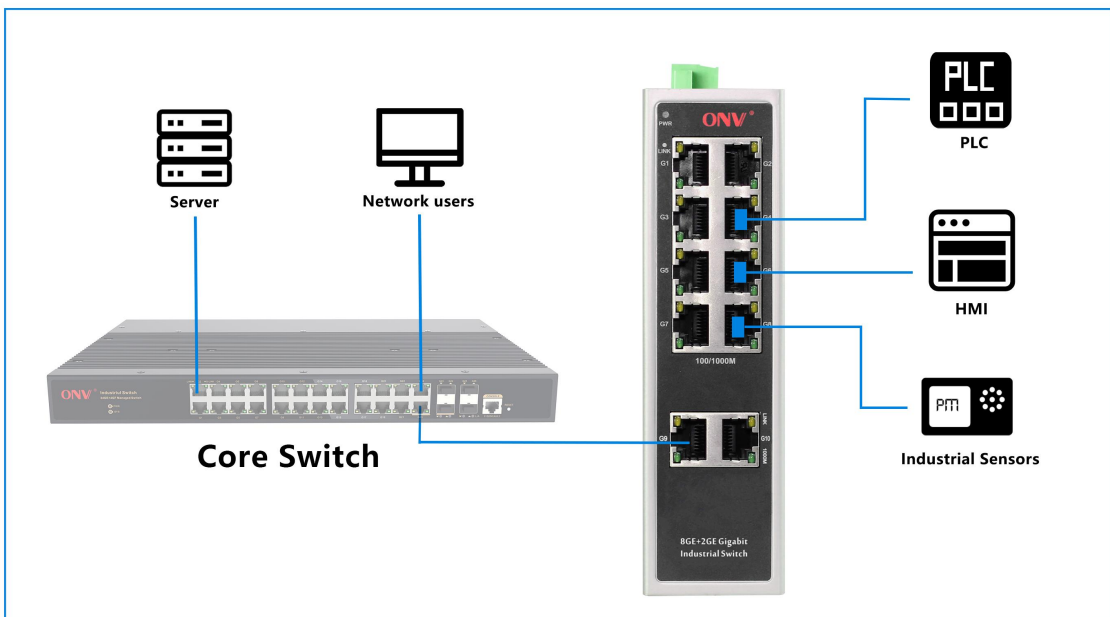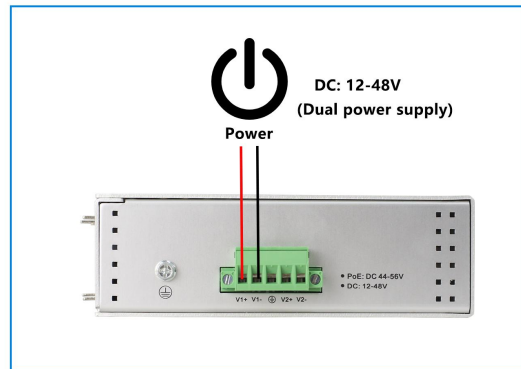IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s |

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	IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge
	IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz)
	IEC61000-4-5 (Surge): Power cable: CM±4kV/ DM±2kV, Data cable: ±4kV
	IEC61000-4-8 (Power frequency magnetic field):100A/m, 1000A/m,1s to 3s
Mechanical Properties	IEC60068-2-6 (Anti Vibration) IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock)
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	5 years, lifelong maintenance.

DIMENSION

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APPLICATION

- **Plug and play**
- **Wide temperature range**
- **DIN Rail installation**

Power

DC: 12-48V
(Dual power supply)

• PoE: DC 44-56V
• DC: 12-48V

V1+ V1- ⏚ V2+ V2-

Server

Network users

Core Switch

PLC

HMI

Industrial Sensors

100/1000M

8GE+2GE Gigabit
Industrial Switch

ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS3108	Unmanaged industrial Ethernet switch with 10*10/100/1000M RJ45 ports. It can support dual DC redundant power input and DIN rail mounting.	24V/24W
Note: The power supply is not included by default and needs to be purchased separately.		

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PACKING LIST

Packing List	Content	Qty	Unit
	10-port full gigabit industrial Ethernet switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

POWER SUPPLY

Product	Model	Description	Unit
24W DIN Rail Industrial Power Supply	GWS-DP24-24	DIN Rail 24W single set of output power supply Input Voltage: AC100V~240V 50-60H, 0.35A Output Voltage: DC24V, 1.0A Operation Temperature: -40℃ to +70℃	PC

CONTACT US

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