

# IES3204P

## Industrial Ethernet Switch

4x10/100/1000Base-T(PoE) to 2x1000Base-X



### Overview

The **IES3204P** is a compact industrial PoE switch engineered to deliver both power and data to remote edge devices in space-constrained environments. Featuring **4 Gigabit PoE+ ports** and **2 Gigabit fiber uplinks**, it offers an ideal solution for powering IP cameras, wireless access points, and IoT sensors without the need for complex electrical cabling. This simplified architecture reduces deployment costs while ensuring high-speed connectivity for mission-critical applications.

**Robust Power & Industrial Reliability** Built to endure extreme conditions, the IES3204P is housed in a **ruggedized IP40 aluminum alloy enclosure** that guarantees stable operation from **-40°C to +85°C**. It integrates a **redundant 48-56VDC power input** system with high-level EFT and ESD protection, making it highly resistant to electrical surges, vibrations, and harsh weather conditions found in outdoor traffic cabinets and industrial automation sites.

**Plug-and-Play Efficiency** The IES3204P is designed for zero-configuration deployment. It automatically detects connected PD (Powered Devices) and negotiates the required power level strictly according to **IEEE 802.3af/at standards**, preventing damage to non-PoE equipment. With flexible **DIN-rail and wall-mounting options**, it fits easily into compact control boxes or wayside enclosures.

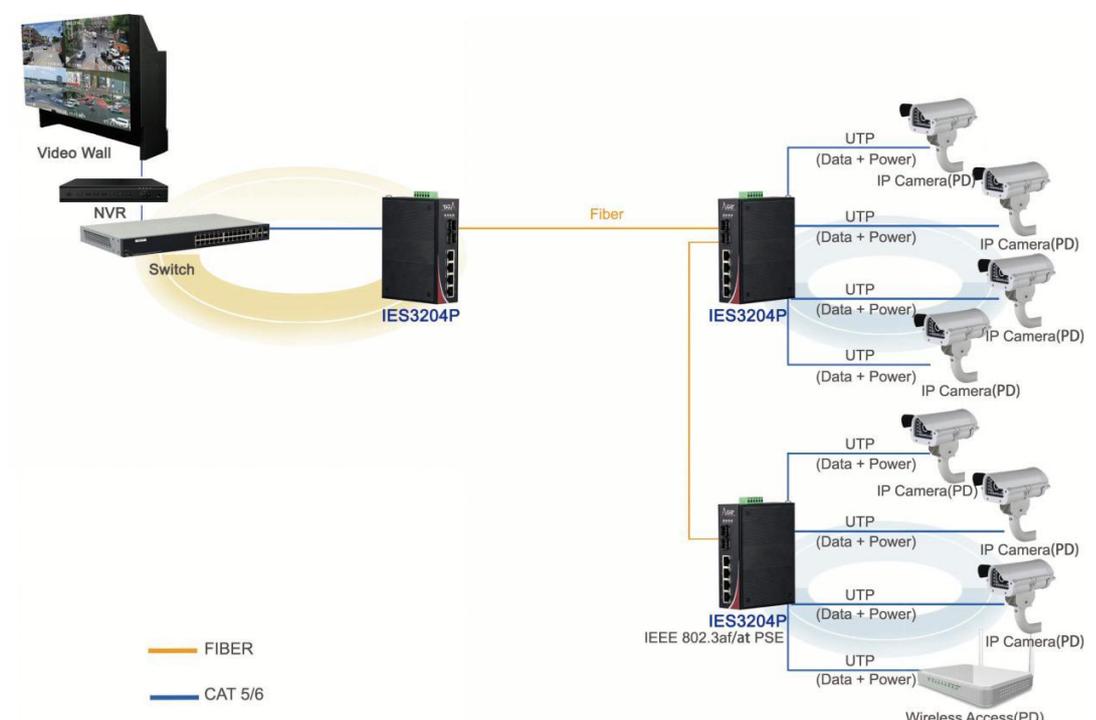
### Port Configuration & Capability

- **Smart PoE+ Injection:** 4 x 10/100/1000Base-T RJ45 ports capable of delivering up to 30W per port (Total budget depends on power supply), fully compliant with IEEE 802.3at/af.
- **Flexible Fiber Uplinks:** 2 x 1000Base-X ports (available with SFP slots or fixed fiber connectors) for reliable long-distance data backhaul.
- **AOA Ecosystem:** The SFP slots support AOA's full range of industrial transceivers, ensuring seamless compatibility and validated performance across extended distances.

## Features

- Provide 4 x 10/100/1000Base-T
- 2 x 1000Base-X for Daisy-Chain
- IEEE803.3af/at compliant
- RJ45 supports auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward
- Max packet size: 10K bytes
- Support wide operating temperature (-40°C ~ +85°C)
- Wide-range redundant power design (48~56VDC)
- Power polarity reverse protect
- Overload current resettable fuse present
- IP-40 protection
- Provides EFT protection for Power line
- Support Ethernet ESD protection
- DIN-Rail and Wall-Mounted Installation
- Low power consumption

## Applications



## Technical Specifications

Standards	IEEE802.3 10Base-T IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-SX/LX standards IEEE802.3x Flow control and back pressure IEEE802.1d Spanning Tree IEEE802.3af/at POE
Performance	Processing Type: Store and Forward Back Bandwidth: 12Gbps MAC Address Size: 1Kbit Packet Buffer Size: 1Mbit Time Delay: <10us Frame: 10Kbytes
Copper Port	Data Rate: 10/100/1000M Connector: RJ45 x 4 Distance: 100m
Fiber Port	Data Rate: 1.25G Connector: SC as default, FC/ST/SFP Slot Optional Distance: MMF 550m/2km, SMF 20/40/80/100/120km, Bi-di: 20/40/80/100/120km
LED indicators	PWR1: ON=Power Connected PWR2: ON= Power Connected FL/A: ON=Fiber Connected; Active=Data Transmitting L/A: ON=Copper Connected; Active= Data Transmitting POE: ON=POE Working; Off=No POE
Power	Input Voltage: 48~56VDC, redundant power inputs Power Consumption: ≤7W PoE Budget: 15.4Wx4=62W(PoE) 30Wx4=120W(PoE+) Protection: Overload Current; Reverse Polarity Connector: Terminal Block
Environment	Operating Temperature: -40°C~ +85°C Storage Temperature: -40°C ~ +95°C Relative Humidity: 5-95% (no condensation)
Physical Characteristics	Housing: IP40 Protection, Aluminum Alloy Installation: DIN-rail mounting, wall mounting(with optional kit) Dimension: 138*107*45mm(device); 220*175*73mm(packing) Weight: 0.48kg(device); 0.63kg(device with packing)

## Order Information

Model	Description
IES3204P-SFP	10/100/1000M,2GX4GE,PoE,SFP Slot
IES3104P-M05	10/100/1000M,1GX4GE,PoE,MM dual fiber,850nm,550m,SC
IES3104P-S20	10/100/1000M,1GX4GE,PoE,SM dual fiber,1310nm,20Km,SC
IES3204P-M05	10/100/1000M,2GX4GE,PoE,MM dual fiber,850nm,550m,SC
IES3204P-S20	10/100/1000M,2GX4GE,PoE,SM dual fiber,1310nm,20Km,SC
Note: AC/DC power supply purchased separately	

## Related Products

Model	Description
DIN-rail Power supply	
NDR-120-48	DIN-rail 120W, 90~264Vac input, 48~55Vdc output
SFP Module	
SFP-M1285L-05I	1.25G MM 850nm LC 550m DDM, Industrial Grade
SFP-M1213L-02I	1.25G MM 1310nm LC 2km DDM, Industrial Grade
SFP-S1213L-20I	1.25G SM 1310nm LC 20km DDM, Industrial Grade
SFP-B1235L-20I	1.25G SM TX1310/RX1550nm LC 20km DDM, Industrial Grade
SFP-B1253L-20I	1.25G SM TX1550/RX1310nm LC 20km DDM, Industrial Grade
Long distance 40/60/80/100/120km is available	
Installation Accessories	
TK12	Wall-mounted kits, 118*18*16mm, $\phi$ 3.5mm L=12mm
A02	Side DIN-rail mounted kits, 72.7*70*8.5mm, $\phi$ 3.5mm L=6mm
CK01	Rack-mounted bracket with Din-rail, 483*215*130mm



TK12 Wall-mounted kits

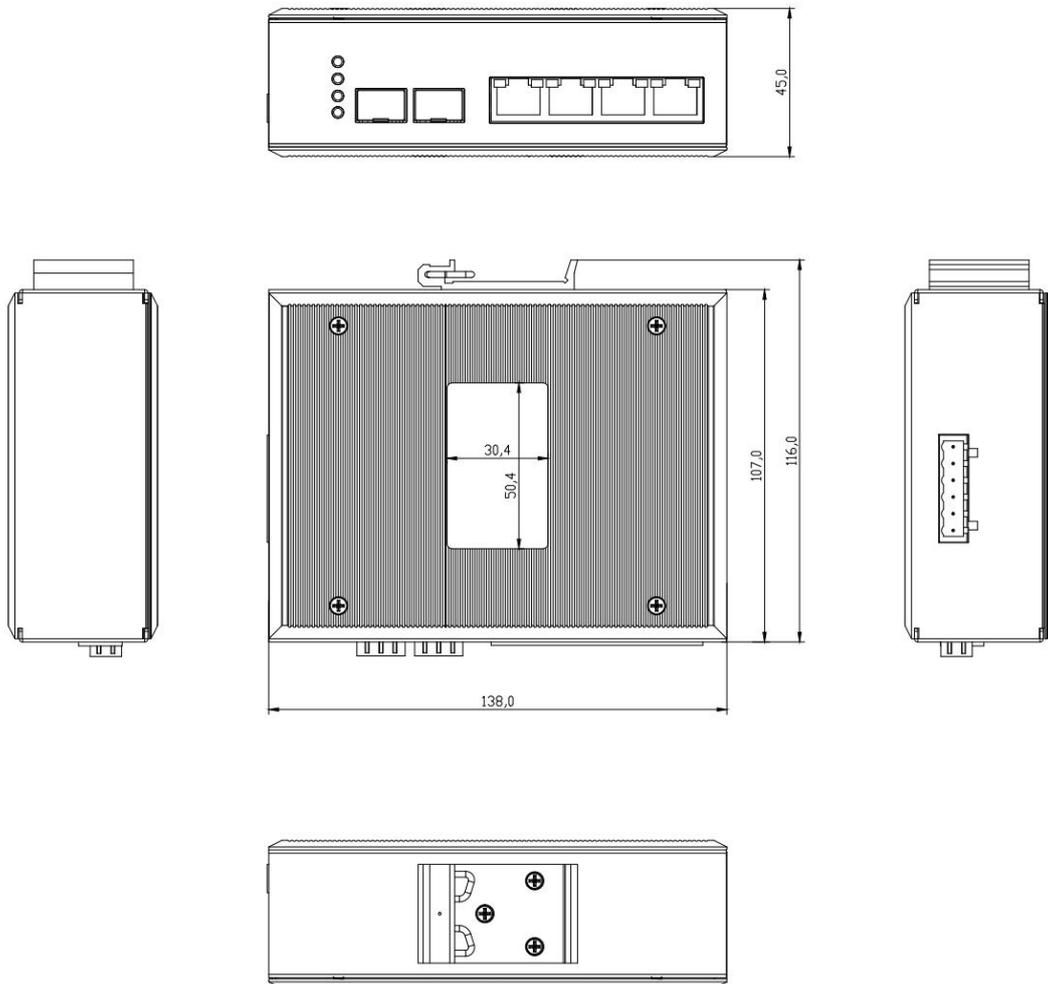


A02 Side DIN rail mounted kits



CK01 Rack-mounted bracket

## Structure diagram (mm)



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