## RP-IPG312

## 3-P Gigabit + 1-SFP(100/1G) slot Industrial Ethernet Switch w/ 1-P 802.3at PoE

RP-IPG312 Industrial Ethernet Switch with PoE feature complies with IEEE802.3af and IEEE802.3at. It delivers 30watts power from PoE port to PD
 devices, and 1 SFP slots is supported.

RP-IPG312 provides power input voltage 48~56Vdc, especially for IP surveillance, traffic monitoring and for a broad range of applications. It can be used as a stand-alone device for buses, trucks, and other vehicles for Surveillance purposes. It can also be cascaded/daisy-chained to other devices to cover wider area through the SFP connection.

With IP-30 standard industrial case protection allows for either DIN rail or wall mounting for efficient use of cabinet space. Its wide operating temperature ranges from $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ for harsh environment.

## Features

- Supports 1 PSE ports based on IEEE 802.3at up to 30 Watts per port
- SFP port supports 100Base-FX and 1000Base-X speed
- Support 48~56VDC power inputs for power redundancy
- Support overload current protection
- Support reserve polarity protection
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store and forward transmission
- Supports flow control
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled
- Built-in power DIN for 110/240VAC environment
- Support Wide Operating Temperature $-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}$


## Specifications

| Standards | - IEEE 802.3 10Base-T Ethernet <br> - IEEE 802.3u 100Base-TX Fast Ethernet <br> - IEEE 802.3ab 1000Base-T Gigabit Ethernet <br> - IEEE 802.3z 1000Base-X Gigabit Ethernet <br> - IEEE802.3x Flow Control and Back Pressure, <br> - IEEE802.3af PoE <br> - IEEE802.3at PoE+ |
| :---: | :---: |
| Interface | - $3 \times$ RJ-45 10/100/1000BaseT(X) auto negotiation, 1 Giga 30Watts PoE 802.3af/at PSE port, Auto MDI/MDI-X, Full/Half duplex and $2 \times 10 / 100 / 1000 \mathrm{M} \mathrm{TX}$ <br> - $1 \times 100 / 1000 \mathrm{M}$ SFP slot |
| Switch Architecture | - Back-plane (Switching Fabric): 8 Gbps |
| Data Processing | - Store and Forward |
| Flow Control | - IEEE 802.3x Flow Control and Back Pressure |
| Jumbo Frame | - 10KB |
| MAC Table Size | - 8K |
| Packet Buffer Size | - 1Mbits |
| Network Cable | - UTP/STP above Cat.5e Cable, EIA/TIA-568 100-ohm (100m) <br> - Fiber Cable (Multi-mode):50/125um,62.5/125um <br> - Fiber Cable (Single-mode): 9/125um |
| Protocol | - CSMA/CD |
| LED indicator | - PW1(Green), PW2(Green), PW3(Amber), RLY(Amber) <br> - TX/RJ-45 port: LNK (Green), PoE(Amber) <br> - SFP (Green) |
| DIP Switch | - DIP 1: OFF: Port 4 SFP 1000M (Default) ; ON: Port 4 SFP 100M <br> - DIP 2: Reserve |
| Reserve polarity protection | - Present |
| Overload current protection | - Present |
| Power Supply | - Redundant Dual DC 48V-56V Power Input <br> - PoE input 48-56VDC |
| Power Consumption | - 4W@48 VDC full load, Without PoE |
| Alarm Relay Contact | - Relay outputs with current carrying capacity of 1 A @24VDC, <br> - Relay in open circuit mode when 2 powers are connected. in short circuit mode when only one power supply is connected |
| PoE power budget | - PoE power per port 30watts <br> - Maximum total power 30Watts, Supports IEEE802.3af/at |
| Removable Terminal Block | - Provide 2 Redundant power, Alarm relay contact, 6 Pin. And circular Power Din for power adapter <br> - Wire range: $0.34 \mathrm{~mm}^{\wedge} 2$ to $2.5 \mathrm{~mm}^{\wedge} 2$ <br> - Solid wire (AWG):12-24/14-22 <br> - Stranded wire(AWG): 12-24/14-22 <br> - Torque:5lb-In/0.5Nm/0.56Nm <br> - Wire Strip length: 7-8mm |
| Environment | - Operating temperature : $-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}$ <br> - Storage temperature: $-40^{\circ} \mathrm{C} \sim 85^{\circ} \mathrm{C}$ <br> - Operating Humidity: 5\% to 95\% (Non-Condensing) |
| Housing | - Rugged Metal ,IP30 Protection |


| Dimension | $\bullet 142 \times 36.2 \times 105 \mathrm{~mm}(\mathrm{LxWxD})$ |
| :--- | :--- |
| Installation mounting | $\bullet$ DIN Rail and Wall Mount Design |
| EMC/EMS | $\bullet$ CE, FCC |
| EMI | $\bullet$ FCC Part 15 Subpart B Class A |
|  | $\bullet$ CE EN 55022 Class A |
| Safety | $\bullet$ IEC EN60950-1 |
| Stability Testing | $\bullet$ EN 60068-2-6 (Vibration), EN 60068-2-27(Shock), EN |

## Diagram(mm)



## Application



## Ordering information

RP-IPG312
3-P Gigabit + 1-SFP(100/1G) slot Industrial Ethernet Switch
w/ 1-P 802.3at PoE, External DC power DIN

