



## 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°C to 75°C for under harsh environment.

## Features

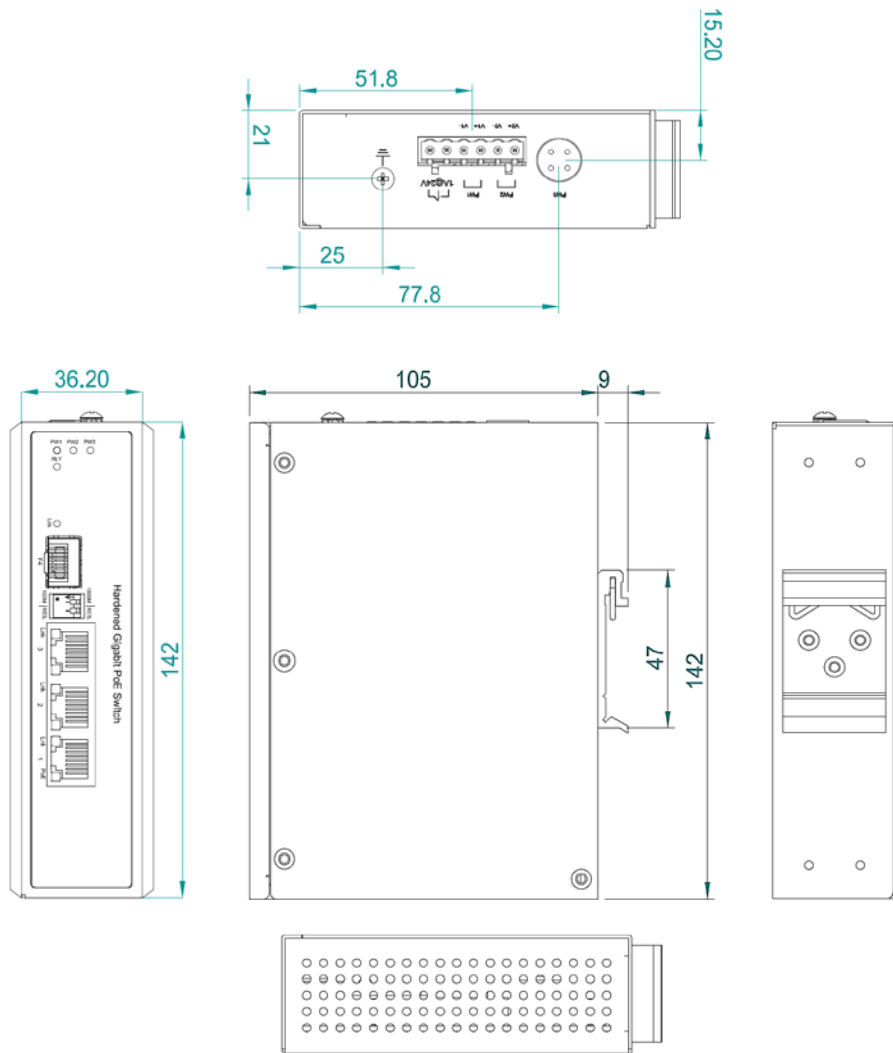
- Supports 1 PSE ports based on IEEE 802.3at up to 30 Watts per port
- SFP port supports 100Base-FX and 1000Base-X speed
- Support 48~56VDC power inputs for power redundancy
- Support overload current protection
- Support reserve polarity protection
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports 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°C~75°C

## Specifications

<b>Standards</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3 10Base-T Ethernet</li> <li>• IEEE 802.3u 100Base-TX Fast Ethernet</li> <li>• IEEE 802.3ab 1000Base-T Gigabit Ethernet</li> <li>• IEEE 802.3z 1000Base-X Gigabit Ethernet</li> <li>• IEEE802.3x Flow Control and Back Pressure,</li> <li>• IEEE802.3af PoE</li> <li>• IEEE802.3at PoE+</li> </ul>
<b>Interface</b>	<ul style="list-style-type: none"> <li>• 3 x 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 x 10/100/1000M TX</li> <li>• 1 x 100/1000M SFP slot</li> </ul>
<b>Switch Architecture</b>	<ul style="list-style-type: none"> <li>• Back-plane (Switching Fabric): 8 Gbps</li> </ul>
<b>Data Processing</b>	<ul style="list-style-type: none"> <li>• Store and Forward</li> </ul>
<b>Flow Control</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3x Flow Control and Back Pressure</li> </ul>
<b>Jumbo Frame</b>	<ul style="list-style-type: none"> <li>• 10KB</li> </ul>
<b>MAC Table Size</b>	<ul style="list-style-type: none"> <li>• 8K</li> </ul>
<b>Packet Buffer Size</b>	<ul style="list-style-type: none"> <li>• 1Mbits</li> </ul>
<b>Network Cable</b>	<ul style="list-style-type: none"> <li>• UTP/STP above Cat.5e Cable, EIA/TIA-568 100-ohm (100m)</li> <li>• Fiber Cable (Multi-mode):50/125um,62.5/125um</li> <li>• Fiber Cable (Single-mode): 9/125um</li> </ul>
<b>Protocol</b>	<ul style="list-style-type: none"> <li>• CSMA/CD</li> </ul>
<b>LED indicator</b>	<ul style="list-style-type: none"> <li>• PW1(Green), PW2(Green), PW3(Amber), RLY(Amber)</li> <li>• TX/RJ-45 port: LNK (Green), PoE(Amber)</li> <li>• SFP (Green)</li> </ul>
<b>DIP Switch</b>	<ul style="list-style-type: none"> <li>• DIP 1: OFF: Port 4 SFP 1000M (Default) ; ON: Port 4 SFP 100M</li> <li>• DIP 2: Reserve</li> </ul>
<b>Reserve polarity protection</b>	<ul style="list-style-type: none"> <li>• Present</li> </ul>
<b>Overload current protection</b>	<ul style="list-style-type: none"> <li>• Present</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>• Redundant Dual DC 48V-56V Power Input</li> <li>• PoE input 48-56VDC</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>• 4W@48 VDC full load, Without PoE</li> </ul>
<b>Alarm Relay Contact</b>	<ul style="list-style-type: none"> <li>• Relay outputs with current carrying capacity of 1 A @24VDC,</li> <li>• Relay in open circuit mode when 2 powers are connected. in short circuit mode when only one power supply is connected</li> </ul>
<b>PoE power budget</b>	<ul style="list-style-type: none"> <li>• PoE power per port 30watts</li> <li>• Maximum total power 30Watts, Supports IEEE802.3af/at</li> </ul>
<b>Removable Terminal Block</b>	<ul style="list-style-type: none"> <li>• Provide 2 Redundant power, Alarm relay contact, 6 Pin. And circular Power Din for power adapter</li> <li>• Wire range: 0.34mm<sup>2</sup> to 2.5mm<sup>2</sup></li> <li>• Solid wire (AWG):12-24/14-22</li> <li>• Stranded wire(AWG): 12-24/14-22</li> <li>• Torque:5lb-In/0.5Nm/0.56Nm</li> <li>• Wire Strip length: 7-8mm</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>• Operating temperature : -40°C~75°C</li> <li>• Storage temperature: -40°C ~85°C</li> <li>• Operating Humidity: 5% to 95% (Non-Condensing)</li> </ul>
<b>Housing</b>	<ul style="list-style-type: none"> <li>• Rugged Metal ,IP30 Protection</li> </ul>

<b>Dimension</b>	<ul style="list-style-type: none"> <li>• 142 x 36.2 x 105mm (LxWxD)</li> </ul>
<b>Installation mounting</b>	<ul style="list-style-type: none"> <li>• DIN Rail and Wall Mount Design</li> </ul>
<b>EMC/EMS</b>	<ul style="list-style-type: none"> <li>• CE, FCC</li> </ul>
<b>EMI</b>	<ul style="list-style-type: none"> <li>• FCC Part 15 Subpart B Class A</li> <li>• CE EN 55022 Class A</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>• IEC EN60950-1</li> </ul>
<b>Stability Testing</b>	<ul style="list-style-type: none"> <li>• EN 60068-2-6 (Vibration), EN 60068-2-27(Shock), EN 60068-2-32(Free Fall)</li> </ul>

## Diagram(mm)



## 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