



## **RP-IPG421-12V**

### **4-P Gigabit + 1-TP/SFP combo + 1-SFP(100/1G) slot Industrial Switch W/ 4-Port PoE+**

RP-IPG421-12V is an industrial PoE Switch features 4 Gigabit ports, 1 TP/SFP combo port, and 1 SFP slot (100/1G). The switch offers a wide power input voltage range of +12 ~ +56Vdc, ensuring compatibility with diverse power sources. This not only boosts input voltage but also minimizes excessive heat generation, enhancing equipment safety and reliability.

RP-IPG421-12V delivers 30 watts of power per PoE port. The total power budget is 120 watts at 24/48/56VDC or 60 watts at 12VDC power input, ensuring reliable power supply to connected PD devices. This feature enables efficient operation of powered devices, making it suitable for a wide range of applications.

With its wide operating temperature range of -40°C to 75°C, RP-IPG421-12V is designed to withstand harsh environments. It ensures consistent performance in challenging conditions, making it suitable for demanding industrial applications where temperature fluctuations and extreme conditions are common. With IP-30 standard industrial case protection allows for easy mounting on DIN rail or walls, optimizing the use of cabinet space.

## **Features**

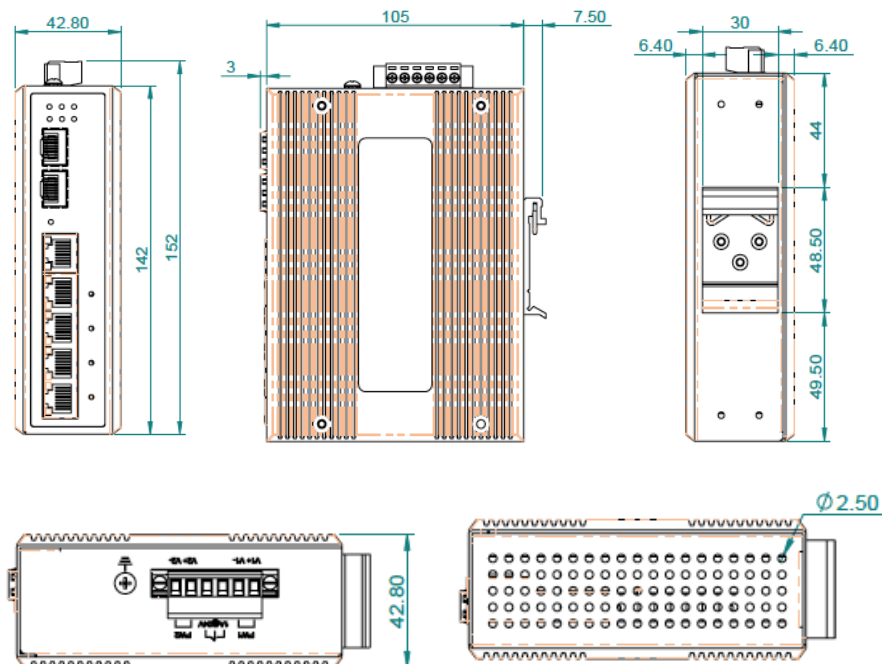
- Supports PSE. based on IEEE 802.3at up to 30 Watts per port
- SFP port supports 100Base-FX and 1000Base-X speed
- Support dual wide range 12~56VDC power inputs for power redundancy
- Support overload current protection
- Support reverse polarity protection
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store and forward transmission
- Supports flow control
- Rugged Aluminum heat sink IP-30 housing design
- DIN-Rail and wall mounting enabled

## Specifications

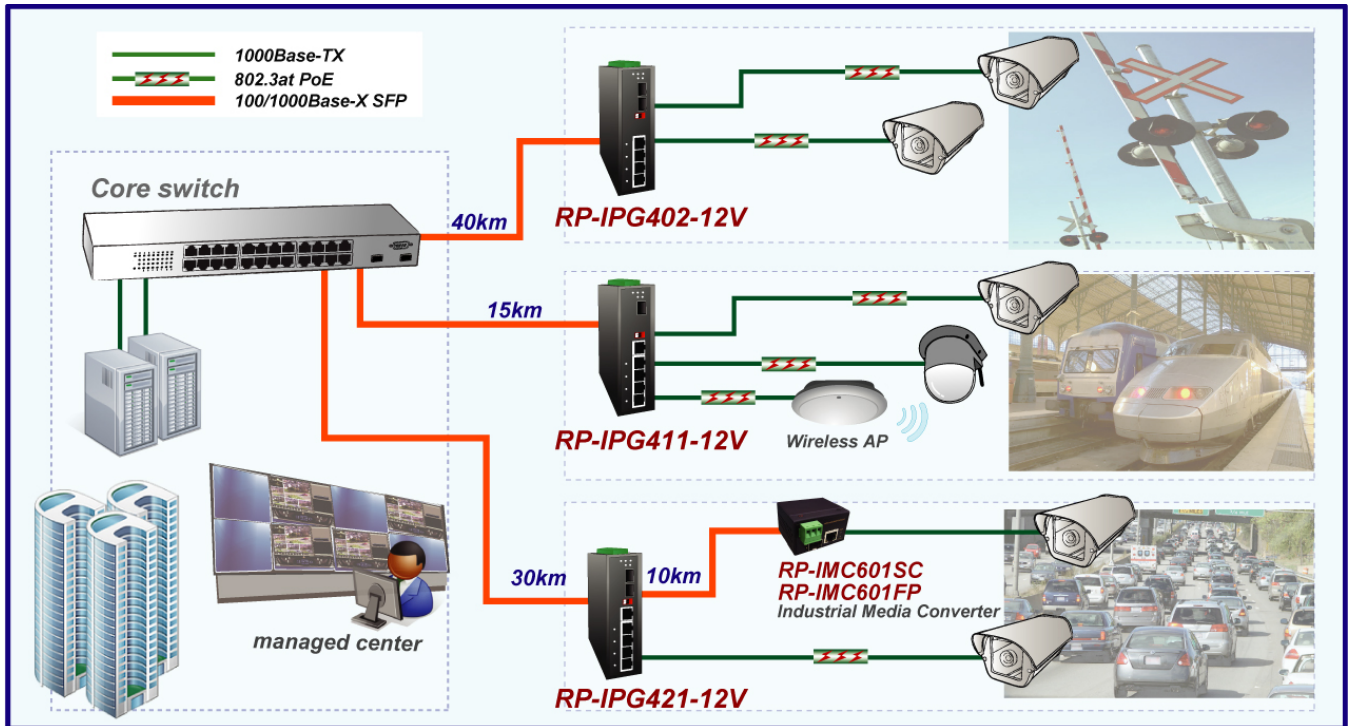
<b>Standards</b>	<ul style="list-style-type: none"> <li>• IEEE 802.3 10Base-T Ethernet</li> <li>• IEEE 802.3u 100Base-TX Fast Ethernet</li> <li>• IEEE 802.3ab 1000Base-T Gigabit Ethernet</li> <li>• IEEE 802.3z 1000Base-X Gigabit Ethernet</li> <li>• IEEE802.3x Flow Control and Back Pressure,</li> <li>• IEEE802.3af for PoE</li> <li>• IEEE802.3at for PoE+</li> </ul>
<b>Switch Architecture</b>	<ul style="list-style-type: none"> <li>• Back-plane (Switching Fabric): 12Gbps</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>• 9KB</li> </ul>
<b>MAC Table Size</b>	<ul style="list-style-type: none"> <li>• 1K</li> </ul>
<b>Packet Buffer Size</b>	<ul style="list-style-type: none"> <li>• 1Mbits</li> </ul>
<b>Network Connector</b>	<ul style="list-style-type: none"> <li>• 5 RJ-45 Port: 10/100/1000BaseT(X) auto negotiation, 4 Gigabit PoE+ 802.3at/af PSE port, Auto MDI/MDI-X function, Full/Half duplex</li> <li>• 2 SFP slots: 100/1000M Base-X</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</b>	<ul style="list-style-type: none"> <li>• PW1(Green), PW2(Green), ERR(Amber)</li> <li>• RJ-45 port: LNK (Green), SPD-1000M(Amber), 10/100M(OFF) ,</li> <li>• SFP port: Link (Green)</li> </ul>
<b>DIP Switch</b>	<ul style="list-style-type: none"> <li>• DIP 1: OFF- Port 5 SFP (Default) ; ON- Port 5 TX</li> <li>• DIP 2: OFF- SFP 1000M (Default) ; ON- SFP 100M</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 12V-56V Power Input</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>• 5.76W@12/24/48 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 1A @24VDC</li> <li>• Relay in short circuit mode when 2 powers are connected. in open circuit mode when only one power supply is connected</li> </ul>
<b>PoE power budget</b>	<ul style="list-style-type: none"> <li>• Per port 30W, Max.36W per port at 12/24/48 VDC input</li> <li>• Max. 120W @24/48VDC power input</li> <li>• Max. 60W @ 12VDC power input</li> </ul>

<b>Removable Terminal Block</b>	<ul style="list-style-type: none"> <li>• Provide 2 Redundant power ,Alarm relay contact ,6 Pin</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 + Aluminum heat sink, IP30 Protection</li> </ul>
<b>Dimension</b>	<ul style="list-style-type: none"> <li>• 142 x 43 x 105mm (HxWxD)</li> </ul>
<b>Installation mounting</b>	<ul style="list-style-type: none"> <li>• DIN Rail mounting and Wall Mounting</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 50155 / EN 60068-2-6 (Vibration), EN 50155 / EN 60068-2-27(Shock), EN 50155 / EN 60068-2-32(Free Fall), EN50155 / EN50121-3, EN50155 / EN50121-4(Rail Road)</li> </ul>

## Diagram



## Application



## Ordering information

**RP-IPG421-12V** 4-P Gigabit + 1-TP/SFP combo + 1-SFP(100/1G) slot Industrial Switch, W/ 4-Port PoE+