The Advanced Networking Technology

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### RP-IPG421A

4-P Gigabit PoE + 1-TP/SFP combo + 1-SFP(100/1G) slot Industrial Switch W/ External DC power DIN



RP-IPG421A Industrial Ethernet Switch with POE+ feature complies with IEEE802.3af and

IEEE802.3at. It delivers 30watts power per POE port and generates a total of 120 watts power to PD devices, and 2 SFP slots are supported. RP-IPG421A provides power input voltage 48Vdc, especially for IP surveillance, traffic monitoring and for a broad range of applications.

RP-IPG421A accepts 3 power input source, from PW1, PW2, and Power DIN (for external power adapter).

RP-IPG421A can be used as a stand-alone device for buses, trucks, and other vehicles for Surveillance purposes. 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**

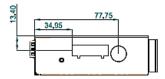
- Supports P.S.E. based on IEEE 802.3at up to 30 Watts per port
- SFP port supports 100Base-FX and 1000Base-X speed
- Support 48~56VDC power inputs for power redundancy
- Support overload current protection
- Support reserve polarity protection
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports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

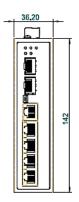
# **Specifications**

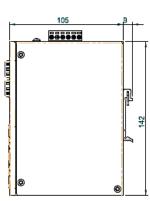
Standards	IEEE 802.3 10Base-T Ethernet
	<ul> <li>IEEE 802.3u 100Base-TX Fast Ethernet</li> </ul>
	<ul> <li>IEEE 802.3ab 1000Base-T Gigabit Ethernet</li> </ul>
	<ul> <li>IEEE 802.3z 1000Base-X Gigabit Ethernet</li> </ul>
	<ul> <li>IEEE802.3x Flow Control and Back Pressure,</li> </ul>
	IEEE802.3af for POE
	IEEE802.3at for POE+
	<ul> <li>5 RJ-45 Port: 10/100/1000BaseT(X) auto negotiation, 4 Giga POE+</li> </ul>
Interface	802.3at/af PSE port, Auto MDI/MDI-X function, Full/Half duplex
	• 2 SFP slots: 100/1000M Base-X
Switch Architecture	<ul> <li>Back-plane (Switching Fabric): 12Gbps</li> </ul>
Data Processing	Store and Forward
Flow Control	<ul> <li>IEEE 802.3x Flow Control and Back Pressure</li> </ul>
Jumbo Frame	• 9KB
MAC Table Size	• 1K
Packet Buffer Size	• 1Mbits
	<ul> <li>UTP/STP above Cat.5e Cable, EIA/TIA-568 100-ohm (100m)</li> </ul>
Network Cable	<ul> <li>Fiber Cable (Multi-mode):50/125um,62.5/125um</li> </ul>
	Fiber Cable (Single-mode): 9/125um
Protocol	• CSMA/CD
	<ul> <li>PW1(Green), PW2(Green), PW3(Amber), RLY(Amber)</li> </ul>
LED indicator	<ul> <li>TX/RJ-45 port: LNK (Green), PoE(Amber)</li> </ul>
	• SFP (Green)
DIP Switch	<ul> <li>DIP 1: OFF: Port 5 SFP (Default) ; ON: Port 5 TX</li> </ul>
	• DIP 2: OFF: SFP 1000M ; ON: SFP 100M
Reserve polarity protection	Present
Overload current	Present
protection	• Tresent
Power Supply	<ul> <li>Redundant Dual DC 48V-56V Power Input</li> </ul>
	POE input 48-56VDC
Power Consumption	<ul> <li>5.76W@48 VDC full load, Without POE</li> </ul>
	<ul> <li>Relay outputs with current carrying capacity of 1 A @24VDC,</li> </ul>
Alarm Relay Contact	<ul> <li>Relay in "OPEN" circuit mode when PW1 and PW2 are connected. in</li> </ul>
	"SHORT" circuit mode when only one power supply is connected
PoE power budget	<ul> <li>POE power per port 30watts. Maximum 36Watts</li> </ul>
	<ul> <li>Maximum total power 120Watts, Supports IEEE802.3af/at</li> </ul>
	<ul> <li>Provide 2 Redundant power, Alarm relay contact, 6 Pin. And circular</li> </ul>
	POWER DIN for power adapter
	<ul> <li>Wire range: 0.34mm<sup>2</sup> to 2.5mm<sup>2</sup></li> </ul>
Removable Terminal Block	• Solid wire (AWG):12-24/14-22
	<ul> <li>Stranded wire(AWG): 12-24/14-22</li> </ul>
	<ul> <li>Torque:5lb-In/0.5Nm/0.56Nm</li> </ul>
	Wire Strip length: 7-8mm
Operating Temperature	● -40°C ~75°C

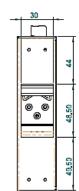
Storage Temperature	• -40°C~85°C
Operating Humidity	<ul> <li>5% to 95% (Non-condensing)</li> </ul>
Housing	<ul> <li>Rugged Metal ,IP30 Protection</li> </ul>
Dimension	• 142 x 43 x 105mm (LxWxD)
Installation mounting	<ul> <li>DIN Rail mounting and Wall Mounting</li> </ul>
EMC/EMS	• CE, FCC
EMI	<ul> <li>FCC Part 15 Subpart B Class A</li> </ul>
	CE EN 55022 Class A
Safety	• IEC EN60950-1
Vibration	• EN 50155 / EN 60068-2-6
Shock	• EN 50155 / EN 60068-2-27
Free Fall	• EN 50155 / EN 60068-2-32

## Diagram

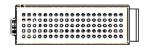












## **Ordering information**

**RP-IPG421A** 

4-P Gigabit PoE + 1-TP/SFP combo + 1-SFP(100/1G) slot Industrial Switch, with External DC power DIN