# RP-IPG816

## 16-P Gigabit 802.3at PoE Industrial Switch

The RP-IPG816 Industrial Ethernet PoE Switch is equipped with 16 ports that support 802.3af/at 30W Gigabit PSE. The RP-IPG816 requires an input power voltage of 48-56VDC and delivers 30 watts of power per PoE port, generating a total of 300 watts of power for PD devices.

The RP-IPG816 has redundant power inputs with overload current protection. If one power source fails, the second one will automatically take over without any loss of operation. This enhances network system reliability and uptime. The switch can accept power input from PW1, PW2, and PW3 Power DIN, providing multiple power source options. RP-IPG816 has been rigorously tested, especially for IP surveillance, traffic monitoring, and a broad range of other applications. With Cold-Design technology, it not only powers up your PD but also reduces excessive heat to a minimum.

The IP30-rated rugged case protection allows for efficient use of cabinet space, with options for both DIN rail and wall mounting. The switch can operate under harsh conditions, with a wide temperature range of -40°C to 75°C.
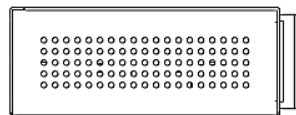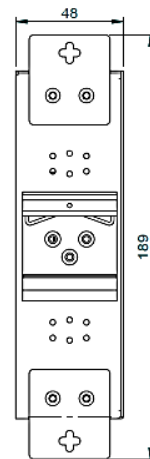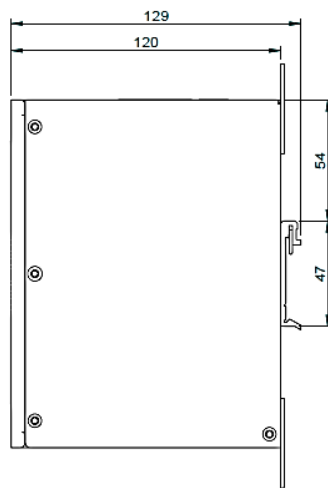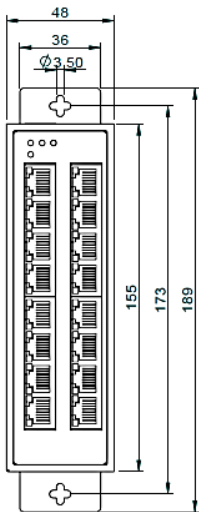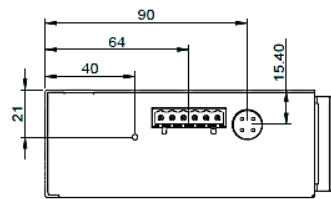
## Features

- Supports PSE. based on IEEE 802.3at up to 30 Watts per port
- Back-plane (Switching Fabric): 32Gbps
- 4.1M Memory Buffer
- 8K MAC Address Table
- Power Polarity Reverse Protect
- Overload Current Re-settable Fuse Present
- Redundant power inputs with overload current protection
- Alarm relay triggered by power failure
- Provide 3 power input source, from PW1, PW2, and PW3 Power DIN
- PW3 offers an independent DIN connection for optional power input.
- Free fall, shock-proof and vibration-proof for industries
- Supports 6000 VDC Ethernet ESD protection
- IP30-rated rugged case protection
- DIN Rail and Wall Mount Design for efficient use of cabinet space.
- Support Wide Operating Temperature -40℃~75℃
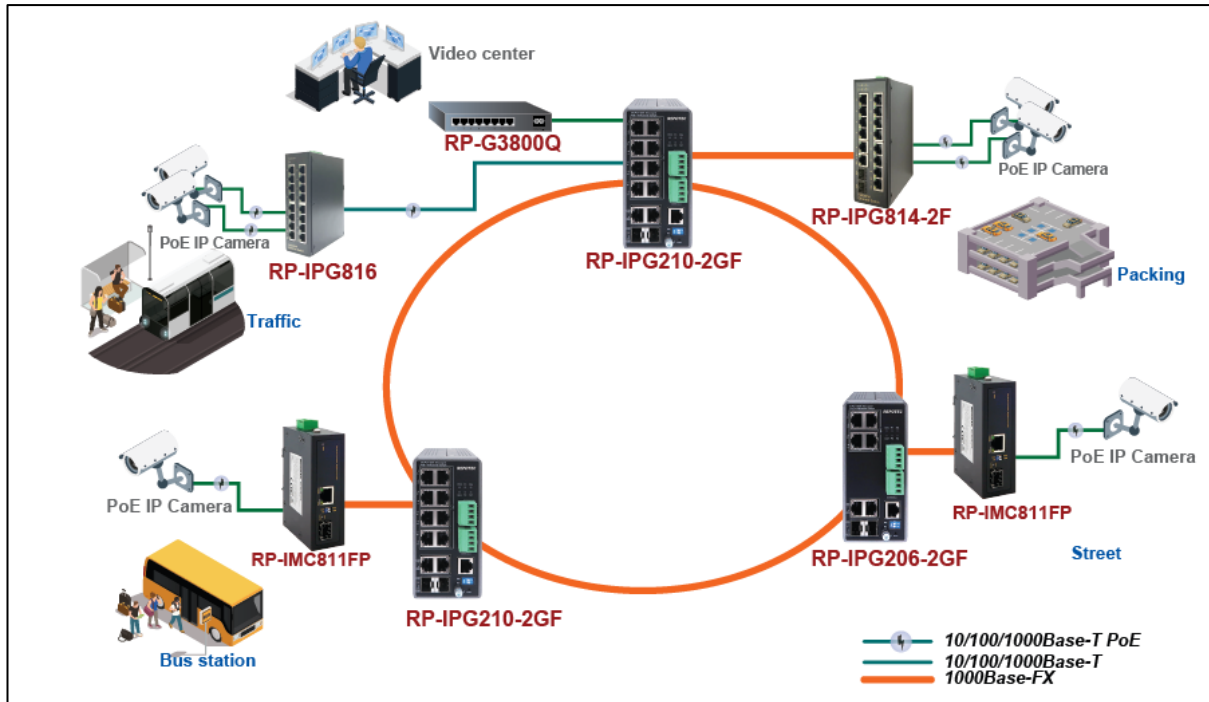
# Specifications

| Standards | • IEEE 802.3 10Base-T Ethernet<br>• IEEE 802.3u 100Base-TX Fast Ethernet<br>• IEEE 802.3z 1000Base-X Gigabit Ethernet<br>• IEEE802.3x Flow Control and Back Pressure<br>• IEEE802.3af for PoE, IEEE802.3at for PoE+ |
|---|---|
| Switch Architecture | • Back-plane (Switching Fabric): 32Gbps |
| Data Processing | • Store and forward |
| Flow Control | • IEEE 802.3x Flow Control and Back Pressure |
| Jumbo Frame | • 9KB |
| Mac Address | • 8K MAC |
| Buffer Memory | • 4.1Mbits |
| Interface | • 16 x 10/100/1000TX RJ-45 with auto negotiation, Auto MDI/MDI-X function, Full/Half duplex with 802.3at/af PSE ports |
| Network Cable | • UTP/STP Cat.5e cable or above Cable EIA/TIA-568 (100m) |
| Protocol | • CSMA/CD |
| LED Indicators | • Per unit: PW1(Green), PW2(Green), PW3(Amber) for External Power adapter, RLY(Amber)<br>• Per port: RJ-45 port LNK(Green)/PoE(Amber) |
| Reverse polarity protection | • Present |
| Overload current protection | • Present |
| Power Consumption | • 12.9W@48 VDC full load, Without PoE |
| Power Supply | • Redundant Dual DC 48V-56V Power Input |
| 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 300Watts with 56VDC input, Supports IEEE802.3af/at |
| Removable Terminal Block | • Provide 2 Redundant power , Alarm relay contact ,6 Pin for PW1 and PW2 (PW3 is an independent Power din connection for external)<br>• Wire range: 0.34mm^2 to 2.5mm^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°C~75°C<br>• Storage temperature: -40°C ~85°C<br>• Operating Humidity: 5% to 95% (Non-condensing) |
| Dimension | • 155 x 48 x 120mm (LxWxD) |

| Case | ● Rugged Metal, IP30 Protection |
|---|---|
| Installation | ● DIN Rail and Wall Mount |
| EMC | ● CE, FCC, EN 55032/35 |
| EMI | ● CISPR 32, FCC Part 15B Class A |
| EMS | ● IEC 61000-4-2 ESD: Contact: 6KV; Air: 8KV<br>● IEC 61000-4-4 EFT: Power: 2KV; Signal: 2KV<br>● IEC 61000-4-5 Surge: Power: 2KV; Signal: 2KV |
| Safety | ● LVD (EN62368-1) |
| Stability Testing | ● IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock),<br>IEC60068-2-6 (Vibration) |

## Dimension

# Application



# Ordering information

**RP-IPG816**        16-P Gigabit 802.3at PoE Industrial Switch