

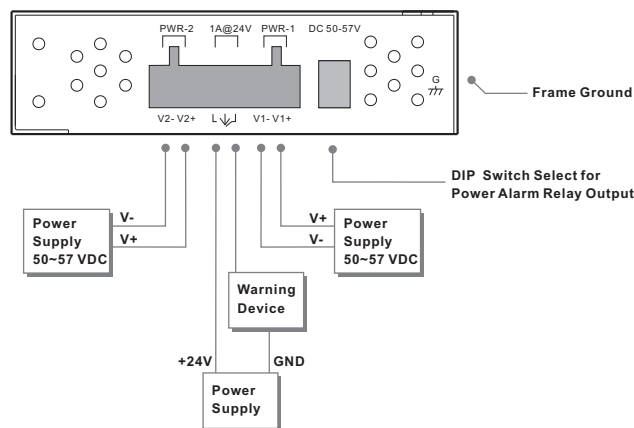
Introduction

IGPS-1411GTPA is an unmanaged PoE Ethernet switch with P.S.E. function. IGPS-1411GTPA support Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. IGPS-1411GTPA has 4x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE setup. The wide operating temperature range from -40°C to 75°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choices for PoE Ethernet application.

Features

- > IGPS-1411GTPA provide 4x10/100/1000Base-T(X) PoE (P.S.E.) ports
- > Support P.S.E. based on IEEE 802.3at standard up to 30 Watts per port
- > SFP port support 100Base-FX and 1000Base-X dual speed
- > Supports jumbo frame up to 9KBytes
- > Support auto-negotiation and auto-MDI/MDI-X
- > Support store and forward transmission
- > Support flow control
- > Rigid IP-30 housing design
- > DIN-Rail and wall mounting enabled

Power Connection Guide



● DIP Switch Function (Power Side)

| DIP-1 | DIP-2 | Description |
|-------|-------|---|
| OFF | OFF | Power failure relay alarm disabled |
| ON | OFF | PWR-1 failure, relay alarm enabled |
| OFF | ON | PWR-2 failure, relay alarm enabled |
| ON | ON | PWR-1 or PWR-2 failure, relay alarm enabled |

Specifications

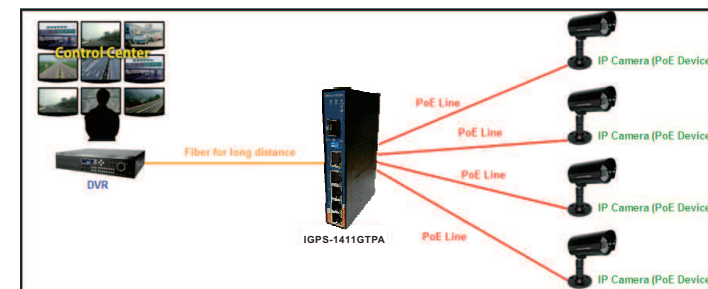
| ORing Switch Model | IGPS-1411GTPA |
|--|---|
| Physical Ports | |
| 10/100/1000Base-T(X) P.S.E. Port with P.S.E. | 4 |
| 10/100/1000Base-T(X) Port in RJ45 Auto MDI/MDIX | 1 |
| 100/1000Base-X SFP port | 1 |
| Technology | |
| Ethernet Standards | IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-X IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow control IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.) |
| MAC Table | 1K MAC addresses |
| Processing | Store-and-Forward |
| Jumbo Frame | Up to 9KBytes |
| LED Indicators | |
| Power Indicator | Green: Power LED x2 |
| Fault Indicator | Amber: Indicate PWR1 or PWR2 failure |
| 10/100/1000Base-T(X) RJ45 port and PoE Indicator (P1~P4) | Green on the left for port Link/Act. Green on the right for PoE power injected. |
| 10/100/1000Base-T(X) RJ45 port Indicator (PS) | Green for port Link/Act. Amber for 10/100Mbps Link/Act |
| 100/1000Base-X SFP port Indicator | Green for port Link/Act. |
| SFP Speed DIP-Switch | |
| DIP-Switch 1/2 | DIP-Switch 1 (ON) and DIP-Switch 2 (ON) : SFP speed setting to 100Mbps DIP-Switch 1 (OFF) and DIP-Switch 2 (OFF) : SFP speed setting to 1000Mbps |
| DIP-Switch | |
| DIP-Switch 1 | Power-1 failed warning : (ON) enable, (OFF) disable |
| DIP-Switch 2 | Power-2 failed warning : (ON) enable, (OFF) disable |
| Fault contact | |
| Relay | Relay output to carry capacity of 1A at 24 VDC |
| Power | |
| Redundant Input Power | Dual DC inputs 50~57VDC on 6-pin terminal block |
| Power Consumption(Typ.) | 6 Watts (Power device not included) |
| PoE Power budget | 120W |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Present |
| Physical Characteristic | |
| Enclosure | IP-30 |
| Dimension (W x D x H) | 26.1(W)x94.9(D)x144.3(H) mm (1.03x3.74x5.68inch.) |
| Weight (g) | 458g |
| Environmental | |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | -40 to 75°C (-40 to 167°F) |
| Operating Humidity | 5% to 95% Non-condensing |
| Regulatory approvals | |
| EMC | EN 55032, EN 55024(CE EMC), FCC Part 15 B, EN 61000-3-2, EN 61000-3-3 |
| EMI | CISPR 32, EN 55032, FCC Part 15 B class A, C-Tick |
| EMS | IEC 61000-4-2 (ESD), IEC 61000-4-3 (RS), IEC 61000-4-4 (EFT), IEC 61000-4-5 (Surge), IEC 61000-4-6 (CS), IEC 61000-4-8 (PFMF), IEC 61000-4-11 (DIP) |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-31 |
| Vibration | IEC60068-2-6 |
| Safety | IEC 60950-1, UL 60950-1, EN 60950-1 |
| Other | IEC 60945, EN 60945 |
| MTBF (hrs) | 916635 hours |
| Warranty | 5 years |

Note: HW version 5.0

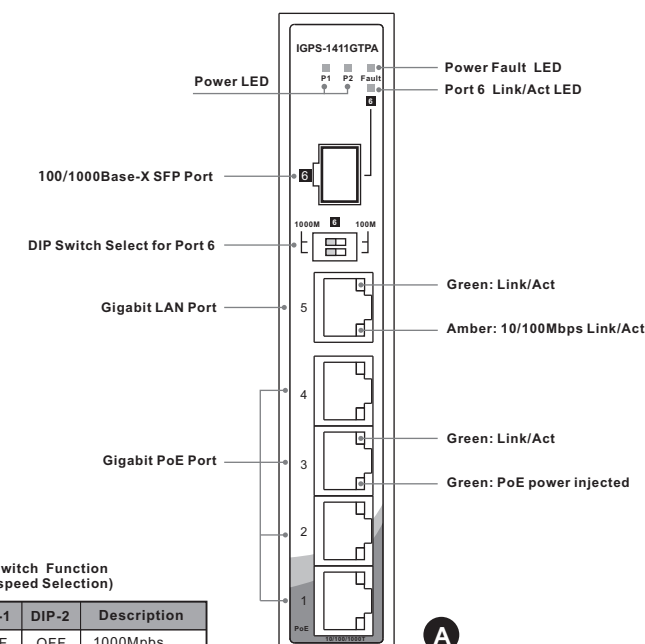
Practical Operation

IGPS-1411GTPA can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices. In addition, there are two different power inputs at terminal block to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.

● Connections of Ethernet devices



Front Panel

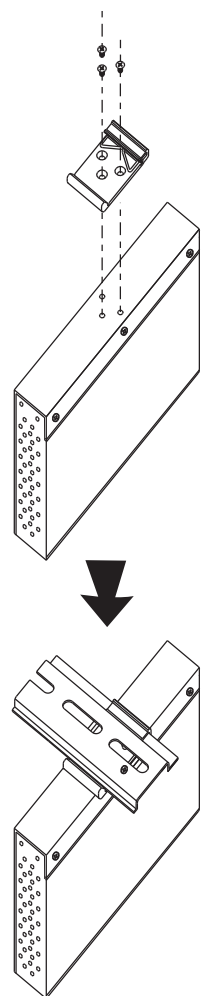


● DIP Switch Function (SFP speed Selection)

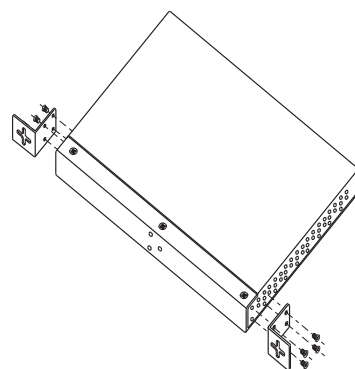
| DIP-1 | DIP-2 | Description |
|-------|-------|-------------|
| OFF | OFF | 1000Mbps |
| ON | OFF | N.A. |
| OFF | ON | N.A. |
| ON | ON | 100Mbps |

Installation

DIN-Rail Install Step



Wall-mounted Install Step



Accessory

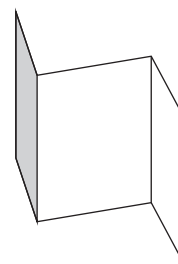
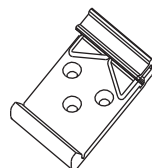
- ① 6-Pin Terminal block
- ② Dust Cover (RJ-45)
- ③ Dust Cover (SFP)



- ④ Round Screw (M3 X3)
- ⑤ Wall-mounted kit (for Slim Type)



- ⑥ 25mm DIN-Rail kit
- ⑦ QIG



Packing list

| Model name | Front Panel | Model Description | Accessory |
|---------------|-------------|--|---|
| IGPS-1411GTPA | A | Industrial 6-port slim type unmanaged Gigabit PoE Ethernet switch with 4x10/100/1000Base-T(X) P.S.E. and 1x10/100/1000Base-T(X) and 1x100/1000Base-X, SFP socket | ① X 1, ② X 5, ③ X 1, ④ X 8, ⑤ X 2, ⑥ X 1, ⑦ X 1 |

Communication Connections

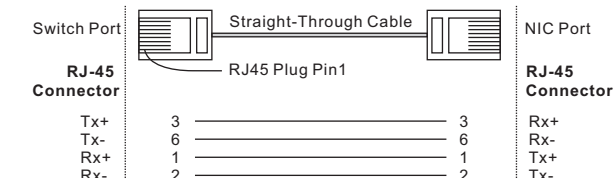
1000Base-T Ethernet Connection

RJ45 (8-pin, MDI) Port Pinouts RJ45 (8-pin, MDI-X) Port Pinouts

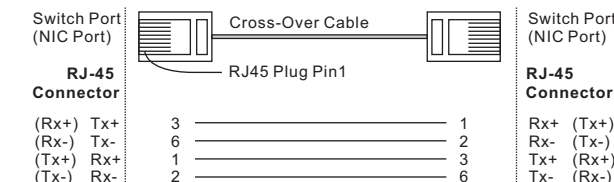
| Pin | MDI | Pin | MDI-X |
|-----|--------|-----|--------|
| 1 | BI_DA+ | 1 | BI_DB+ |
| 2 | BI_DA- | 2 | BI_DB- |
| 3 | BI_DB+ | 3 | BI_DA+ |
| 4 | BI_DC+ | 4 | BI_DD+ |
| 5 | BI_DC- | 5 | BI_DD- |
| 6 | BI_DB- | 6 | BI_DA- |
| 7 | BI_DD+ | 7 | BI_DC+ |
| 8 | BI_DD- | 8 | BI_DC- |

10/100Base-T(X) Ethernet Connection

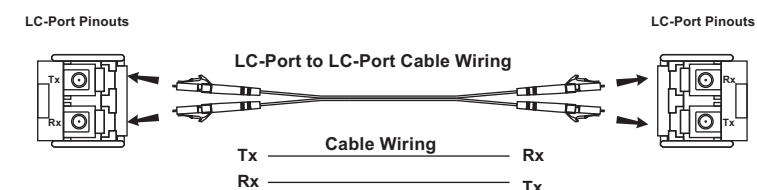
RJ45 (8-pin) to RJ45 (8-Pin) Straight-Through Cable Wiring



RJ45 (8-pin) to RJ45 (8-Pin) Cross-Over Cable Wiring



100/1000Base-X SFP Port Connection



Pin Definition

10/100Base-T(X) PoE P.S.E. Port

| Pin No. | Description |
|---------|----------------------------|
| # 1 | TD+ with PoE Power input + |
| # 2 | TD- with PoE Power input + |
| # 3 | RD+ with PoE Power input - |
| # 6 | RD- with PoE Power input - |

1000Base-T PoE P.S.E. Port

| Pin No. | Description |
|---------|-------------------------------|
| # 1 | BI_DA+ with PoE Power input + |
| # 2 | BI_DA- with PoE Power input + |
| # 3 | BI_DB+ with PoE Power input - |
| # 4 | BI_DC+ |
| # 5 | BI_DC- |
| # 6 | BI_DB- with PoE Power input - |
| # 7 | BI_DD+ |
| # 8 | BI_DD- |

ORing

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