

IGS-600-4PH24
IGS-600-4PHE24

Industrial Grade Gigabit Ethernet PoE Switches



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ISO 9001
 ISO 14001

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Introduction

IGS-600-4PH24 models are non-managed industrial grade Gigabit PoE (Power over Ethernet) switches that provide stable and reliable Ethernet transmission. Housed in rugged DIN rail or wall mountable enclosures, these switches are designed for harsh environments, such as industrial networking and intelligent transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. Standard operating temperature range models (0 to 60°C) and wide operating temperature range models (-40 to 75°C) fulfill the special needs of industrial automation applications.

Features

- Redundant dual DC inputs 24/48VDC
- DC power 'boost' feature
- IP30 rugged metal housing
- Wide temperature range -40~75C (-E models)
- Support for Ethernet jumbo frames
- DIP switch enable/disable broadcast storm filter
- UL508, CE, FCC, EN50121-4 Rail traffic
- Industrial grade EN61000-6-2 EMS and EN61000-6-4 EMI

Specifications

Ethernet Interface

- Connector: RJ-45 (shielded)
- 6-ports
- Auto MDI/MDI-X
- Speed: 10/100/1000Base-T (Auto)
- Duplex: Full/Half (Auto-negotiation per IEEE802.3u)
- Supports IEEE802.3x Flow Control
- Store & Forward Switch
- Switching Fabric: 12Gbps non-blocking
- Packet buffer: 1mb
- Standards: IEEE802.3, 802.3u, 802.3x, 802.3ab
- 8K MAC table
- MTU: 64~10240 bytes
- Broadcast Storm protection (enable/disable by DIP)

Specifications (cont.)

Power over Ethernet

- 4 PoE enabled ports, Alternate A Mode
- Supports IEEE802.3af 15.4watts PoE per port
- Supports IEEE802.3at 30watts PoE Plus per port (120W total)
- Positive (VCC+) pins 1,2 (55VDC ±1V)
- Negative (VCC-) pins 3,6

Power

- Absolute input range: 20~57VDC
- Reverse polarity protection: Yes
- Dual power inputs: Yes
- Connector: removable terminal block
- Consumption: 2.91A@48VDC, 139.6Watts (120W for PoE)
 5.95A@24VDC, 142.9Watts (120W for PoE)

Mechanical

- Water & Dust Proof : IP30 Protection
- Dimensions : 106 x 62.5 x 135mm (D x W x H)
- Mounting : DIN-Rail, Wall Mount (kits included)
- Weight : 840 g

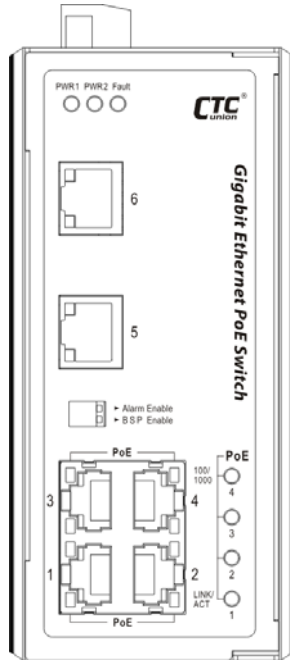
Environmental

- Operating Temperature :
 - 0°C ~ 60°C, -40°C ~ 75°C (wide temp. for *-E)
- Storage Temperature: -40°C ~ 85°C
- Humidity : 5 ~ 95% (non-condensing)

Certifications

- EMI: FCC Part 15 sub B class A, EN55022 Class A, EN61000-6-4
- EMS: (Electromagnetic Susceptibility)
 - EN61000-6-2 Immunity for Industrial Environment
 - EN61000-4-2 (ESD) Level 3, Criteria B
 - EN61000-4-3 (RS) Level 3, Criteria A
 - EN61000-4-4 (Burst) Level 3, Criteria A
 - EN61000-4-5 (Surge) Level 3, Criteria B
 - EN61000-4-6 (CS) Level 3, Criteria A
 - EN61000-4-8 (Magnetic Field) Level 3, Criteria A
- Safety: UL508 (pending)
- Railway Traffic: EN50121-4
- Shock: EN60068-2-27 Freefall: EN60068-2-32
- Vibration: EN60068-2-6
- MTBF: 296517 hours

Connectors



IGS-600-4PH24

This model has six electrical LAN ports (labeled 1, 2, 3, 4, 5, 6) that utilize shielded RJ-45 connectors. These ports support 10/100/1000M Auto Negotiation and Auto MDI/MDI-X Ethernet.

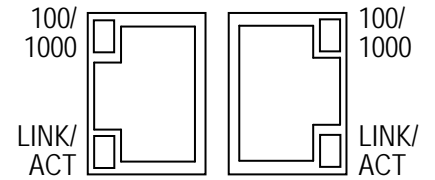
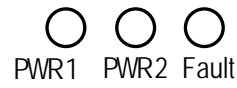
Ports 1 through 4 support PoE (Power over Ethernet) per IEEE802.3af (15.4W) or IEEE802.3at (30W) for connection to standard PoE PD (Power Devices) such as IP Cameras, Access Points, IP Phones, Digital Signage, etc.

Power over Ethernet eliminates the need to run separate power to these devices to simplify deployment and reduce expenses.

The PoE ports can also connect to any non-PoE device for normal Ethernet transmission without any damage to the non-PoE device or to the **IGS-600-4PH24**.

LED Indicators

IGS-600-4PH24 has LEDs on the front face that report the condition of power, fault, PoE, LAN link and speed.



PWR1: This green LED will light if power is connected and active at the PWR1 terminal connection.

PWR2: This green LED will light if power is connected and active at the PWR2 terminal connection.

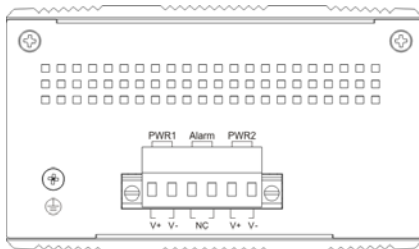
Fault: This amber LED will light if one of the power inputs has fault condition and as long as DIP sw#1 is OFF.

100/1000: This dual color LED will light with amber color when the LAN connected speed is 1000M, it will light with green color when the LAN speed is 100M and will remain off if the connected speed is 10M.

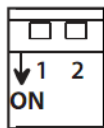
LINK/ACT: This green LED will light when the LAN port has a link and will flash when there is Ethernet traffic.

PoE: These green LEDs will light when the LAN has successfully negotiated PoE and is supplying output power to the remote connected PD device.

Power, Alarm and DIP switch



A removable terminal block provides both power and alarm connections. Power can be provided through the dual inputs from separate sources. One electrical relay can be wired into an alarm circuit. The relay is connected as Normally Closed (will open upon alarm condition).



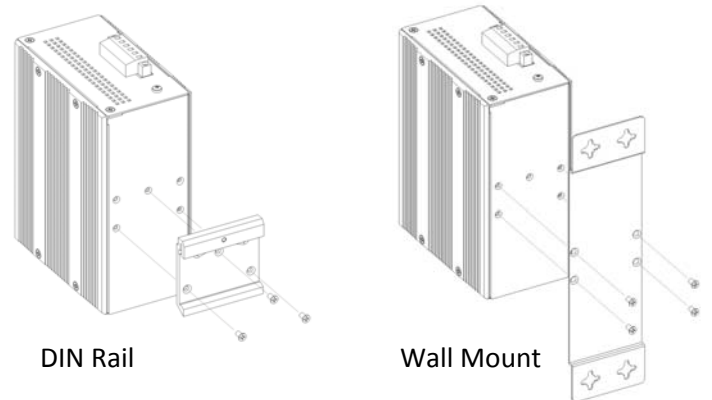
IGS-600-4PH24 uses a 2-pole DIP switch for configuration. Each pole of the switch has the following functions:

1. **Alarm Enable:** When 'On' this switch will disable alarm relay and fault LED if there is a power failure in one supply. If only connecting to a single power source, place this switch 'On' to disable alarm.

2. **BSP:** When 'On' this switch will disable the broadcast storm protection feature which is enabled by default.

Installation

IGS-600-4PH24 comes with both wall mount and DIN rail hardware brackets. When installing the DIN rail bracket, be sure to correctly align the orientation pin.



IGS-600-4PH24 with DIN Rail bracket has a steel spring in the upper rail of the bracket. This spring is compressed for mounting and un-mounting by applying downward force.

