



# Industrial 5 Port Gigabit Ultra PoE++ Switch

## Unmanaged Industrial PoE++ Gigabit Ethernet Switch

RLH hardened industrial Ethernet switches are engineered to provide reliable network performance in harsh environments. The Industrial 5 Port Gigabit Ultra PoE++ Switch provides Gigabit data transfer and can supply four Powered Devices (PDs) with up to PoE++-rated power. Four (4) of its five (5) copper Ethernet ports can supply PoE++.

Four (4) PoE++-rated ports can output up to 90 Watts of power in compliance with Type 4 IEEE 802.3bt power distribution, while the switch upholds a maximum power consumption budget of 190W. It also includes DIP switches that disable the PoE++ ports' PoE functionality, decreasing the switch's overall power consumption. This switch maintains redundant power input terminals with a corresponding alarm relay that informs users of lost redundant power and/or PoE faults.

The Industrial 5 Port Gigabit Ultra PoE++ Switch's ability to supply PDs with PoE++ categorizes it as an ideal solution when deploying advanced surveillance systems, high-performance wireless networks, and industrial automation systems. Common power-hungry PDs integrated with this switch are monitored PTZ IP cameras, gate and building access controllers, wireless access points, and thin clients.

## Features

### System

- 4 Ports of Gigabit PoE++ (90W/Port), 1 Non-PoE Gigabit Port
- IEEE 802.3af/at/bt-compliant (Type 3 and Type 4 IEEE 802.3bt)
- Supports Mode A, Mode B, and 4-Pair Mode PoE power relaying
- PoE ON/OFF DIP switches for simplified PoE port control
- Status LEDs for input power, alarm relay, and PoE Load
- Alarm relay for redundant power loss and PoE faults
- Overload current protection and reverse polarity protection

### Environment

- Hardened to operate in -40°F to +75°F (-40°C to +167°C)
- DIN rail or Wall Mount (Wall mount ears included)

### Power

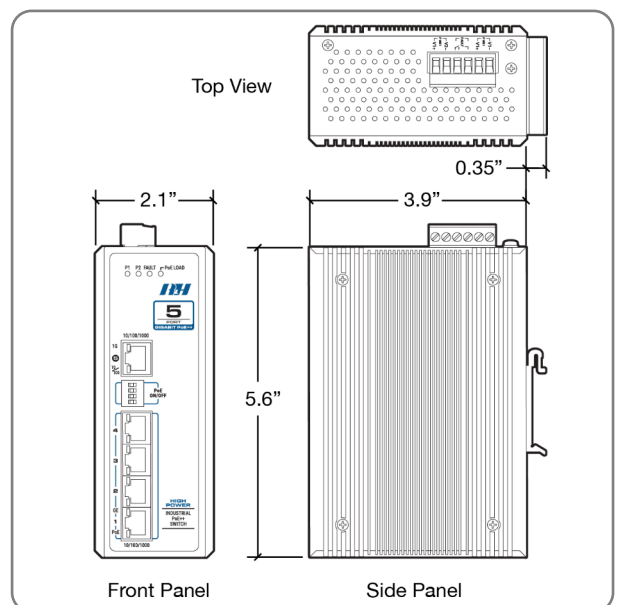
- Redundant Power Inputs (48~55VDC)

### Quality

- Highly reliable 1,542,873-hour MTBF
- UL Listed, CE, FCC, RoHS, REACH, NDAA Compliant



Industrial 5 Port Gigabit Ultra PoE++ Switch



Dimensions



## IEEE Compliance

<b>Standards</b>	<b>IEEE 802.3</b>	10Base-T (Ethernet)	<b>IEEE 802.3u</b>	100Base-TX (Fast Ethernet)
	<b>IEEE 802.3ab</b>	1000Base-T (Gigabit Ethernet)	<b>IEEE 802.3x</b>	Flow Control (Back Pressure)
	<b>IEEE 802.3af</b>	Power over Ethernet (PoE)	<b>IEEE 802.3at</b>	Power over Ethernet Plus (PoE+)
	<b>IEEE 802.3bt</b>	High Power Power over Ethernet (PoE++)		

## Switch Characteristics

<b>Switching Architecture</b>	Layer 2, Unmanaged
<b>Backplane Capacity</b>	10Gbps
<b>Jumbo Frame</b>	10KB
<b>Data Processing Type</b>	Store and Forward
<b>Memory Buffer</b>	1Mb
<b>MAC Table Size</b>	8K

## Interface Characteristics

<b>Ethernet Ports</b>	<b>5x Copper</b>	10/100/1000Base-T(X) - 4x PoE++ (IEEE 802.3af/at/bt-compliant), 1x Non-PoE
<b>DIP Switches</b>	<b>4x Switch</b>	PoE ON/OFF - PoE Port Power Output (Default Position: ON)
<b>Alarm Relay Contact</b>	<b>1x Relay</b>	Normally Closed (SPST) - 24VDC, 1A resistive (Redundant Power Loss, PoE Faults)
<b>PoE Pinout</b>	<b>Mode A</b>	Pin 1 (V-), Pin 2 (V-), Pin 3 (V+), Pin 6 (V+)
	<b>Mode B</b>	Pin 4 (V+), Pin 5 (V+), Pin 7 (V-), Pin 8 (V-)
	<b>4-Pair Mode</b>	Pin 1 (V-), Pin 2 (V-), Pin 3 (V+), Pin 4 (V+), Pin 5 (V+), Pin 6 (V+), Pin 7 (V-), Pin 8 (V-)
		*This Ethernet switch supports Mode A, Mode B, and 4-Pair Mode PoE relaying power schemes
<b>LED Status Indicators</b>	<b>Input Power</b>	Power Input 1 (P1), Power Input 2 (P2)
	<b>Alarm Relay</b>	Alarm Warning Status (FAULT)
	<b>PoE</b>	PoE Load Status (P/L)

## Power Characteristics

<b>Power Input</b>	Dual 48-55VDC Redundant Power Inputs (6-Position Pluggable Terminal Block) *For PoE++ (IEEE 802.3bt) applications, apply a 53-55VDC input
<b>Overload Current Protection</b>	Present - Slow-Blow Fuse
<b>Reverse Polarity Protection</b>	Present - Polarity (+/-) Insensitive Terminal Contacts
<b>Max. Power Consumption</b>	190 Watts (assuming full PoE load)
<b>Max. PoE Output</b>	90 Watts (per PoE port)



## Mechanical/Environmental Characteristics

<b>Construction</b>	Power coated IP30 steel housing
<b>Case Dimensions</b>	2.12" (W) x 3.90" (D) x 5.59" (H), (54mm x 99mm x 142mm)
<b>Weight</b>	1.85 lbs. / 0.84 kg (Unit Weight) 2.51 lbs. / 1.14 kg (Shipping Weight)
<b>Installation</b>	Standard T-35 DIN rail clip and wall mount ears (Included)
<b>Temperature</b>	Storage: -40°C to +85°C (-40°F to +185°F) Operating: -40°C to +75°C (-40°F to +167°F)
<b>Ambient Relative Humidity</b>	5% to 95% (non-condensing)

## Regulatory Approvals

<b>EMI/EMS</b>	FCC Part 15 Subpart B Class A, CE EN55032, CE EN55035, CE EN61000-4-2/3/4/5/6		
<b>Stability Testing</b>	IEC60068-2-6 (Vibration)	IEC60068-2-27 (Shock)	IEC60068-2-32 (Free Fall)
<b>Safety</b>	UL 61010-1 and UL 61010-2-201, File Number: E544369 CE, FCC, RoHS, REACH, NDAA Compliant		
<b>MTBF</b>	1,542,873 hours		
<b>Warranty</b>	Limited 5-Year - Visit <a href="http://www.fiberoptic.com">www.fiberoptic.com</a> for warranty information and coverage details		

## Ordering Information

Description	Part Number
Unmanaged PoE++ Switch, 5 Gigabit Ports (4x 90W PoE++, 1x Non-PoE), Powering Voltage 48~55 DC	<b>ETH-5GP-BT-1</b>

Description	Part Number
Industrial AC/DC + DC/DC Switching Power Supply, 48 Volts, 3.2 Amps, 150 Watts	<b>AD1150-48F</b>

## Contact

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## Support

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