# Quick Start Guide

## HES6B-Z Series Ethernet Switch

The HES6B-Z series switches are the industrial Ethernet switches launched by Henrich Electronics Corporation. This line of switches support four 10/100Mbps BaseT(X) copper ports and two 100Mbps BaseF(X) optical fiber ports. All copper ports support auto-negotiation, and all ports support full and half duplex, MDI/MDIX.

Designed with performance, security and reliability in mind, the HES6B-Z series switches are widely used in industrial and outdoor applications with DIN-rail mounting. The products support redundant power supply inputs with the range of 12-52 VDC.

## A Package Checklist

The HES6B-Z series switch package consists of following items:

√ The HES6B-Z Series Switch Unit
√ Quick Start Guide

HENRICH®

Henrich Electronics Corporation

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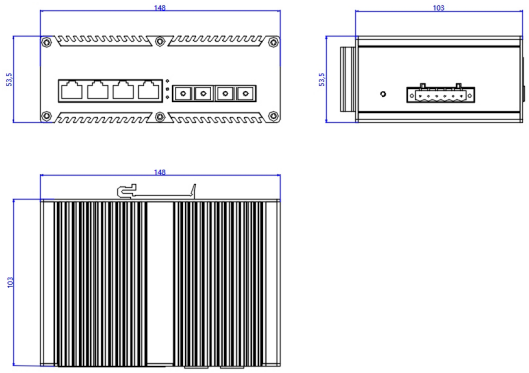
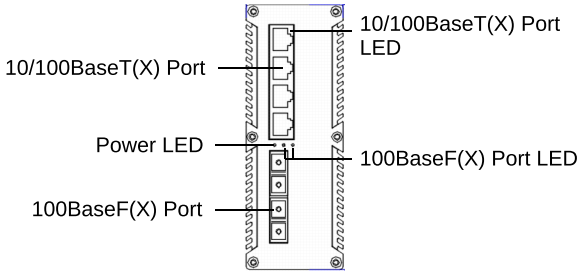
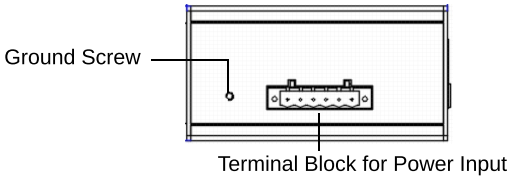
## B Panel Layout



### Front Panel




### Side Panel




## C LED Indicators

**Power**

| | |
|---|---|
| The red light keeps on. | Power supply is normal. |
| The red light goes off. | Power supply is faulty or unavailable. |

**Copper Port**

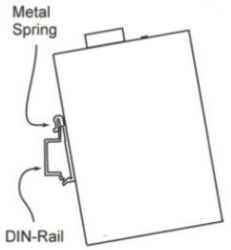
| | |
|---|---|
| The yellow light goes on. | The port connection is normal. |
| The yellow light is flashing. | Link communication is normal. |
| The yellow light and the green light go off. | Port is disconnected. |

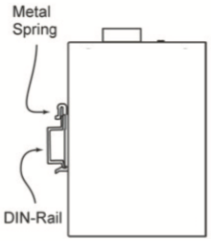
**Optical Fiber Port**

| | |
|---|---|
| The green light goes on. | The port connection is normal. |
| The green light is flashing. | Link communication is normal. |

## E Product Installation

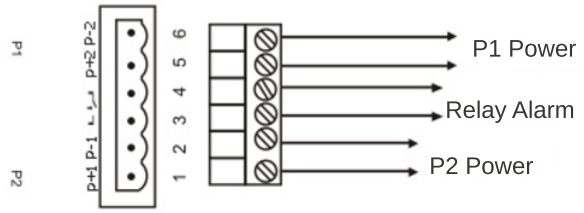
1. Insert the top of the Din-rail into the slot. Make sure the Din-rail been fasten below the stiff metal spring.
2. Press the switch downward in the direction of the lower hook of the guide rail until it is stuck.
3. Check that whether the inspection is stable after buckle.




## F Wiring the Power Input

Connect the power cable to the specified position of the 6-core wiring terminal, and connect the wiring terminal to the standard power supply input (P+1 and p-1 input for P1 power supply, P+2 and P-2 input for P2 power supply). The available power supply voltage ranges from 12VDC to 52VDC (POE version: 48VDC to 57VDC).



### Warning

1. Turn the power off before you remove any wires. Read the side label of the product for power related instruction.
2. Please ensure the unit is connected a power supply voltage that corresponds to the range of rating voltage. Never use a greater voltage power source.
3. This is a Class A product, and running this device in a residential environment may cause wireless interference. In this case, the user may need to take practical action against the interference.
4. Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

## G Installation Precautions

To avoid equipment damage and personal injury caused by improper use, please observe the following precautions:

 In order to avoid damage caused by equipment falling, please place the equipment in a stable environment.

 When supplying power to the equipment, pay attention to confirm the range of power supply voltage, as well as the positive and negative terminals of the power supply, in order to avoid damage to the equipment by wrong operation.

 To reduce the risk of electric shock, ensure that the equipment is well grounded in the working environment.

## H Specifications

### Protocol

| | |
|---|---|
| Standards | IEEE802.3; IEEE802.3i; IEEE802.3u; IEEE802.3x |

### Interface

| | |
|---|---|
| Optical Fiber Port | Number of Port: 2<br>Port Type: Fixed Optical Port (SC/ST Port)<br>Interface Rate: 100Base-FX |
| Electrical Port | Number of Port: 4<br>Port Type: RJ45 Copper Port<br>Port Speed: 10/100M Adaptive Copper Port |
| Power | Phoenix Terminal |

### Transportation Distance

| | |
|---|---|
| Copper Port | 100m |
| Optical Fiber | Multi-mode Optical Fiber: 2km<br>Single-mode Optical Fiber: 20km |

### Power

| | |
|---|---|
| Input Voltage | DC 12 ~ 52V (Dual Power Supply Redundant Input) |
| Full Load Power Consumption | ＜5W |
| Overload Protection | Supported |
| Reverse Connection Protection | Supported |
| Matched Power Supply Cable and Plug | Purchased Separately |

### Switch Characteristics

| | |
|---|---|
| Transmission Mode | Store and Forward |
| Packet Buffer Size | 1Mbit |
| MAC Table Size | 2K |

### Working Environment

| | |
|---|---|
| Working Temperature | -10°C ~ 60°C |
| Storage Temperature | -10°C ~ 60°C |
| Relative Humidity | 5% ~ 95% (No Condensation) |

### Mechanism

| | |
|---|---|
| Housing | High Strength Corrugated Profile Enclosure with Fanless Design |
| Ingress Protection | IP40 |
| Installation | Din-rail Mounting |
| Size (W × H × D) | 2.1" × 5.8" × 4.1"<br>(53.5mm ×148 mm × 103 mm) |

### Standards and Certifications

| | |
|---|---|
| EMI | FCC Part15, CISPR (EN55022) Class A |
| EMS | EN61000-4-2(ESD) Level 3,<br>EN61000-4-3(RS) Level 3,<br>EN61000-4-4(EFT) Level 3,<br>EN61000-4-5(Surge) Level 3,<br>EN61000-4-6(Radio Frequency Transmission) Level 3,<br>EN61000-4-8 (Power Frequency Magnetic Field) Level 3,<br>EN61000-4-16 (Common-mode Transmission) Level 3 |
| Shock | IEC 60068-2-27 |
| Freefall | IEC 60068-2-32 |
| Vibration | IEC 60068-2-6 |

### Warranty

| | |
|---|---|
| Warranty | 5 years |