HYUNDAI
ELECTRONICS

16-PORT GIGABIT DIN-RAIL INDUSTRIAL Managed PoE+ SWITCH

HYU-NE-SW-MI16PF001

USER MANUAL

GENUINE PRODUCT OF
HYUNDAI CORPORATION

First, Safety Precautions

- To ensure the safety of personnel and equipment, carefully read and follow all safety signs, precautions, and instructions in this manual when installing, operating, and maintaining the equipment.

  The warnings and notes in this manual do not cover all possible safety precautions and are intended to supplement the applicable safety requirements and standards.

  Failure to comply with the safety instructions and applicable standards may result in personal injury, equipment damage, or other losses, for which the manufacturer shall not be responsible.

  ***Note:**
  The figures are for reference only. The actual device may vary.

Second, Installation Environment Requirements

- The industrial switch support DIN rail, desktop, and 19”in racked mounted.
- The temperature and humidity of the installation site must be kept within the temperature and humidity range in which the industrial switch can work normally. For the normal temperature range and relative humidity range of the industrial switch, refer to the industrial switch product datasheet.
- Industrial (PoE) switch grounding is an important step in the installation process. The correct connection of the grounding cable is an important guarantee for the switch's lightning protection, high-voltage surge protection, interference protection, and static electricity damage.

Third, lightning protection requirements

- Do not use outdoor overhead wiring. The equipment may be damaged by lightning. Please use buried or steel pipe wiring.

- The switch must be grounded before turning on the power to ensure that the grounding
  resistance of the installation environment does not exceed 10Ω, otherwise the equipment
  may be damaged.

Fourth, Pre-commissioning

■ 4.1 Debugging steps

- Connect the switch to the DC12-57V power supply (at this time, you must pay attention to the positive and negative polarity of the power supply, please refer to the instructions for the wiring
- method), then connect the AC end of the power supply, observe whether the switch has completed the self-check normally, and confirm that the switch has been powered on normally.

- Use a network cable to connect the computer to any Ethernet port/optical interface of the switch.

- Connect the test equipment and check whether the port data is received/sent normally and whether there is packet loss through the PC computer ping packet method.

- For switches that support the POE power supply, please confirm that the connected device supports POE power supply voltage and power within the specified range.

- For switches using single-fiber optical modules, please confirm that the optical modules at both ends of a single fiber jumper must be A+B paired before the test can communicate normally.

Fifth, industrial switch installation

■ Installation instructions

- Please select a suitable installation location or cabinet according to the installation method of the switch. (DIN rail type installation, customers need to configure DIN35mm national standard guide rail, rack-mounted installation is suitable for national standard 1U/19 inch cabinet)
- When installing the switch, you need to use the matching mounting ear accessories and screws.
- Please wear protective gloves when installing.
- It is forbidden to install the switch with power on.
- The exterior paint decoration of the switch should be kept intact. If there is any paint drop, the paint part needs to be touched up immediately to prevent corrosion.

■ Installation preparation tool

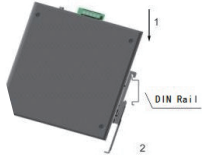
- Labor protection gloves
- Plum screwdriver
- Flat screwdriver

Installation steps

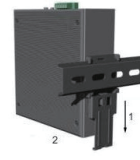
DIN Rail installation

■ Pull the mounting ear installation method:

- (Installation) As shown in picture 1-1, first snap the hook part of the hanging ear into the upper rail of the rail, and then pull the buckle down to snap into the lower rail of the rail to complete the installation;
- (Removal) As shown in picture 1-2, first pull down the buckle, the lower bayonet of the mounting ear is separated from the lower rail of the guide rail, and then pull it up.



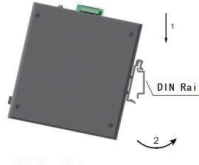
cture 1-1



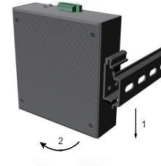
Picture 1-2

■ Push-in mounting ear installation method:

- (Installation) As shown in picture 2-1, first snap the hanging ears with barbs and circlips into the upper rail of the rail, and then press the buckle downwards to snap into the lower rail of the rail to complete the installation;
- (Removal) As shown in picture 2-2, first apply downward pressure, wait until the lower bayonet of the mounting ear is separated from the lower rail of the guide rail, and then pull it upward.



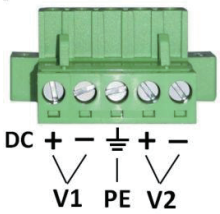
Picture 2-1



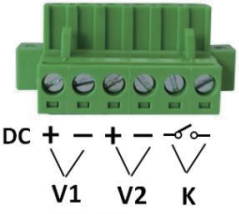
Picture 2-2

Sixth, Switch connection instructions

- Connect the switch power line to the power supply. (AC or DC).
- The grounding wire needs to be prepared by the user.



Picture 5



Picture 6

Note: For the specific wiring method, please connect according to the actual identification of the device interface. Terminals are defined as follows

Sign	Name	Description
V1	Main power input connection terminal	1. When wiring, be sure to confirm the positive and negative polarity of the DC power line 2. For switches that support POE, the power supply voltage must be within the range of DC48-57V 3. Non-POE switch, the power supply voltage range is DC12-57V
V2	Standby power input connection terminal	
PE	Power protection ground connection terminal	Power supply protective ground
K	Alarm switch connection terminal	Used to connect alarm unit circuits (such as alarm lights, alarm signal control switches)

The AC power supply must be disconnected when installing and removing the switch and the power line. Live operation is prohibited to avoid personal injury.

Seventh, check after installation

- Check whether the mounting parts (hanging ears) are firm and whether the screws are tightened.
- Check whether the polarity of all cable connections is correct, whether the connection is firm and reliable, and ensure that there is no short circuit.
- Check whether there are screw holes without screws and whether the screws of each module are firm.
- Power on and check. Whether the industrial switch has completed the self-check process normally, and whether the indicator of the connected port is normal.

Model list

Model Name	HYU-NE-SW-MI8PF003	HYU-NE-SW-MI16PF001
Picture		
Management Level	Layer 2+	
PoE+ Ports	8*10/100/1000Mbps PoE+ Ports	16*10/100/1000Mbps PoE+ Ports
PoE++ BT Ports	Port #5 - 8, Max 90W per Port	N/A
Uplink Ports	2*1000Mbps SFP Ports	4*1000Mbps SFP Ports
PoE Standard	IEEE 802.3AF/AT/BT	IEEE 802.3AF/AT
Power Supply Pin	Default 1/2 (+), 3/6 (-)	
Input Voltage	48-57V/DC	
Switching Capacity	20Gbps	40Gbps
Forwarding Rate	14.88Mpps	29.76Mpps
MAC	8K	16K
Operation Temperature	-40~+85℃	
Dimension	165x120x52MM	165x148x68MM

Indicator and Function table

Symbol	Indicator Function	State	Description	Colour
PWR or P	Work indicator	On	Normal	Green
		Off	Switch no power supply or failure	
		Blinking	System abnormality or failure	
PoE	PoE	On	Normal power supply	Yellow
		Blinking	PD device failure or power overload	
		Off	No connected PD or PoE power off	
Link	Network	On	Link is ok	Green
		Blinking	The link port is receiving/sending data	
		Off	Link failure or port failure	
L/A or F	Optical fiber	On	The optical fiber port is ok	Green
		Blinking	The optical fiber port is receiving/sending data	
		Off	Optical fiber failure or port failure	
SYS	System Indicator	Blinking	The system working is properly	Green
		Off	The system is being started or is abnormal	

***Note**

PoE: Applicable to PoE switch models with either two LED indicators on the RJ45 port, or a separate PoE LED indicator alongside the Link/ACT LED.

SYS: Applicable for Managed switches only.

Login Web Page

◆ For more L2+/L3 Management features, please login the WEB-Base UI as the following steps.

Step 1. Find the IP Address of the switch.

The default login IP address is 192.168.0.1, with a subnet mask of 255.255.255.0

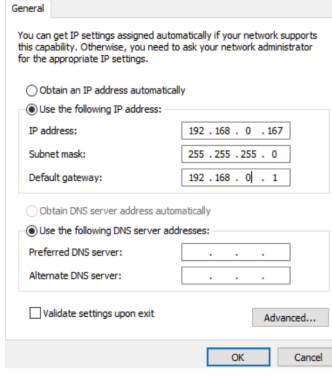
If the switch receives an IP address from a DHCP server from your network, you can find this IP address on DHCP server.



Step 2. Configure IP address on your PC to ensure that the switch and PC are in the same subnet.

If the switch uses the static IP address of 192.168.0.1, configure your PC's IP address as 192.168.0.x ("x" ranges from 2-254), and set the subnet mask as 255.255.255.0.

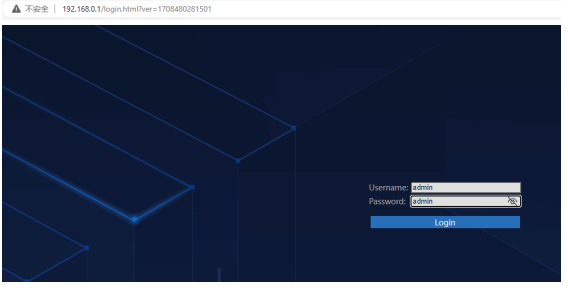
If the switch uses an IP address assigned by a DHCP server, set your PC to obtain an IP address automatically from the DHCP server.



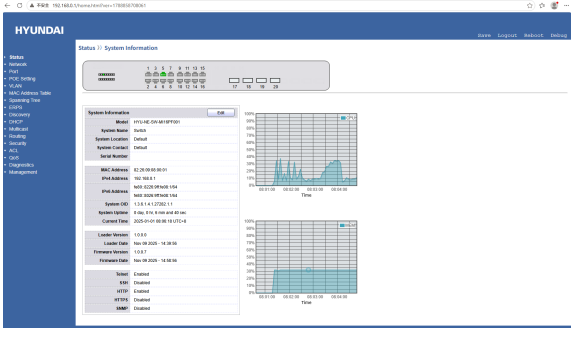
Step 3. Launch a web browser on your PC. Enter the IP address of the switch in the address bar and provide the username and password.

The default Login Name: admin

The default Password: admin



Step 4. After login, the interface and function list as below.



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