



ISE - P Industrial Ethernet Switch Quick Guide

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1. Product Information

This document instructs users on how to rapidly deploy the ISE Switch in the field.

Before beginning, check that you have:

- Small flat-head screwdriver
- Normal Philips-head screwdriver

Carefully check the contents of the package and look for any missing or damaged parts. If there are any problems, please contact InHand sales staff. InHand also offers optional accessories to customers depending on the site characteristics and customer requirements please see the list of optional accessories below:

1.1 Standard Accessories

Accessories	Quantity	Description
ISE – P Switch	1	Industrial Ethernet Switch
DIN-Rail	1	Install in Switch
2-pin power terminal	1	A Black elbow shaped power plug

1.2 Features

- **Input Voltage:**

12/24/48VDC & 24VAC Class 2

- **Power Consumption:**

<5W

- **Size:**

24mm (W) x 100mm (H) x 61.8mm (D)

(3 or 5 Ports Model)

40mm (W) x 100mm (H) x 61.8mm (D)

(8 Ports Model)

- **Weight:**

<0.16KG (3 or 5 Ports Model)

<0.23KG (8 Ports Model)

- **Operating Temperature:**

-40°C~75°C

- **Humidity:**

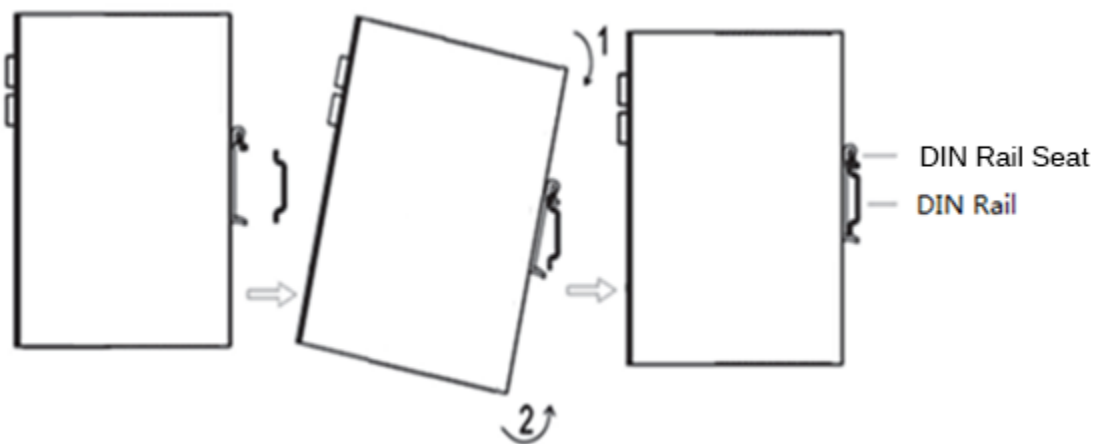
5%~95%, No Condensation

2. Installation

2.1 DIN rail mounting

2.1.1 Mount the Switch onto a DIN-rail

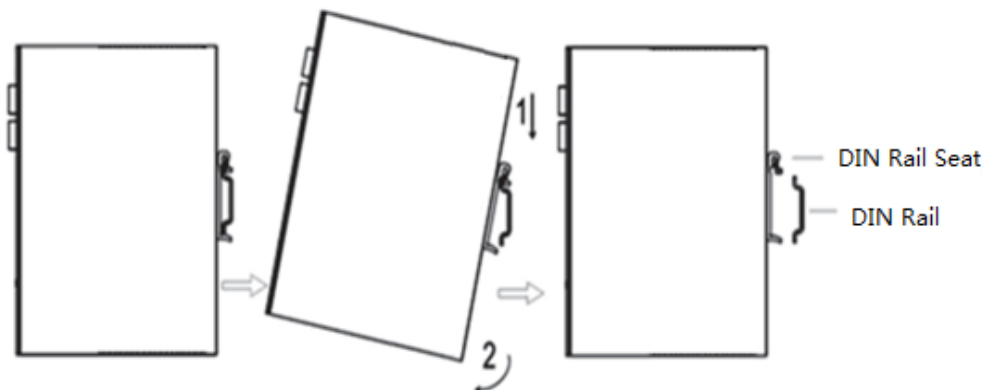
- Fixed to the back of the Switch is a DIN rail mounting bracket. To mount the Switch follow these steps:
- Hook the top seat of the mounting bracket onto the DIN rail.
- Push the bottom of the Switch towards the DIN rail, causing the bottom lip to snap onto the bottom of the rail. This may require some force.



2.1.2 Uninstall the ISE from a DIN Rail

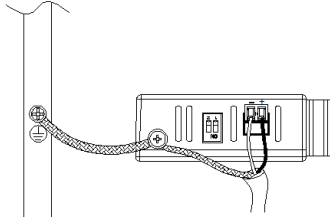
Removing the ISE is opposite of mounting it.

1. Pull the bottom part of the Switch out until the bottom lip of the bracket unclips from the rail. This may take some force.
2. Lift the Switch so that the rail seat clears the top part of the DIN rail. Now, you are finished.

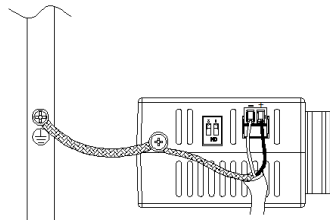


2.2 Power Connection Diagram

AC/DC input cable connection diagram for 3 or 5 Ports Model



AC/DC input cable connection diagram for 8 Ports Model



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- ⚠ Before connecting the device to the AC/DC power inputs, make sure the AC/DC power source voltage is stable.
 - L/+ end is connected to the positive AC/DC wire.
 - N/- end is connected to the negative AC/DC wire.
- In order to improve radiation protection and ESD resistance, equipment must be grounded. The grounding method will vary from site to site.
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2.3 DIP Switch Setting

The switch allows users to enable or disable the Quality of Service (QoS) function, and broadcast storm protection (BSP)

with DIP switch on the outer panel.

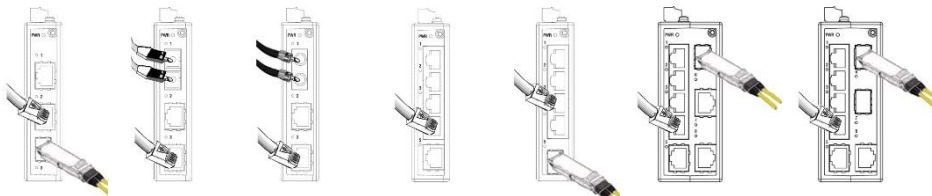
Settings for the Fast Ethernet switches:

DIP Switch	Setting	Description									
Quality of Service(QoS)	ON	Enable the quality of Service to handle packet priorities in two WRR queues. QoS and priority mapping matrix in each queue.									
		<table border="1"> <tr> <td>Qos 3bit priority</td> <td>7.6.5.4</td> <td>3.2.1.0</td> </tr> <tr> <td>Queues</td> <td>1</td> <td>0</td> </tr> <tr> <td>WRR</td> <td>16</td> <td>1</td> </tr> </table>	Qos 3bit priority	7.6.5.4	3.2.1.0	Queues	1	0	WRR	16	1
		Qos 3bit priority	7.6.5.4	3.2.1.0							
	Queues	1	0								
WRR	16	1									
	OFF	Disables the Quality of Service									
Broadcast Storm Protection	ON	Enables broadcast storm protection (only allow maximum of 200 broadcast packets per second) for each Ethernet port.									
	OFF	Disable the broadcast storm protection.									

Settings for the Gigabit Ethernet switches:

DIP Switch	Setting	Description																				
Quality of Service(QoS)	ON	Enable the quality of Service to handle packet priorities in four WRR queues. QoS and ToS/DSCP priority mapping matrix in each queue.																				
		<table border="1"> <tr> <td>CoS Priority</td> <td>7,6</td> <td>5,4</td> <td>3,2</td> <td>1,0</td> </tr> <tr> <td>ToS/DSCP Priority</td> <td>63 to 48</td> <td>47 to 32</td> <td>31 to 16</td> <td>15 to 0</td> </tr> <tr> <td>Queues</td> <td>3</td> <td>2</td> <td>1</td> <td>0</td> </tr> <tr> <td>WRR</td> <td>8</td> <td>4</td> <td>2</td> <td>1</td> </tr> </table>	CoS Priority	7,6	5,4	3,2	1,0	ToS/DSCP Priority	63 to 48	47 to 32	31 to 16	15 to 0	Queues	3	2	1	0	WRR	8	4	2	1
		CoS Priority	7,6	5,4	3,2	1,0																
		ToS/DSCP Priority	63 to 48	47 to 32	31 to 16	15 to 0																
	Queues	3	2	1	0																	
WRR	8	4	2	1																		
	OFF	Disables the Quality of Service																				
Broadcast Storm Protection	ON	Enables broadcast storm protection (at a maximum of 2000 broadcast packets per second) for each Ethernet port.																				
	OFF	Disable the broadcast storm protection.																				

2.4 Port Connection Diagram



2.5 The LED Array

LED	State		Description
Power(PWR)	Green	On	Power is being supplied to power input.
		Off	Power is not being supplied to power input.
Ports (Full 1000M)	Green	On	When the port is active and links on 1000 Mbps.
		Blinking	When the port's data is being transmitted at 1000 Mbps.
		Off	When the port is inactive or link down.
	Amber	On	When the port is active and links on 100 Mbps.
		Blinking	When the port's data is being transmitted at 100 Mbps.
		Off	When the port is inactive or link down.
Ports (Full 100M)	Green	On	When the port is active and links on 100 Mbps.
		Blinking	When the port's data is being transmitted at 100 Mbps.
		Off	When the port is inactive or link down.