



# **KY-3210DM**

## **Industrial Ethernet Switch**

### **DYMEC Installation Guide**

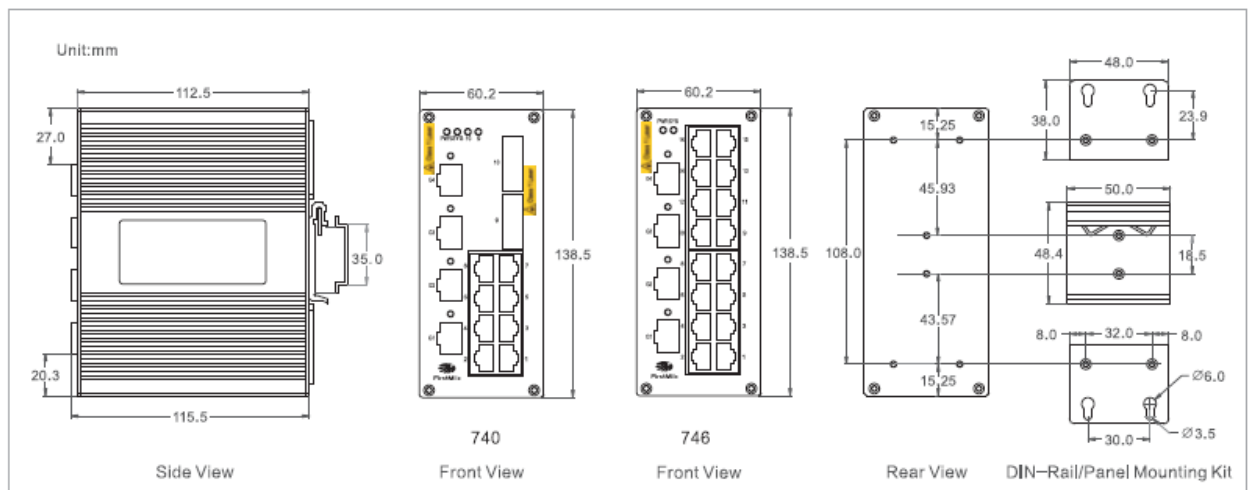
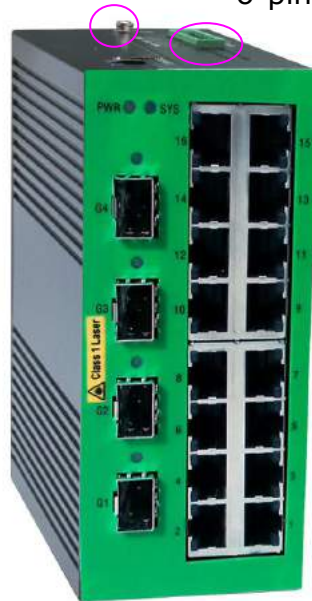
Oct 30, 2013

Version: 1.0

## 1 · Product Photo and Dimensions

Ground screw

6-pin terminal block



## 2 · Fitting the switch on the DIN rail, grounding

▼ You mount the switch on a 35 mm hat rail according to DIN EN 60175. Attach the upper snap-in guide of the switch into the hat rail and press it down against the hat rail until it snaps into place.

▼ You ground the switch via a separate ground screw on the top panel of the switch.

Ground screw



### 3 · **Connecting the supply voltage at the terminal block, startup procedure**

▼ The supply voltage is connected via a 6-pin terminal block with snap locking.

- Input Voltage: 24VDC (12 ~ 36VDC), with redundant dual inputs

- Input current: < 0.55A@24VDC

▼ By connecting the supply voltage at the terminal block, you start the operation of the switch.

▼ When the PWR (Power) and SYS (System) indicator lights on the front panel of the switch lit yellow and green respectively, it means that the switch has completed startup.

### 4 · **Configuring IP**

▼ The default static IP Configuration:

IP Address: 192.168.0.253

IP Sub Network: 255.255.255.0

IP Gateway: 192.168.0.201

▼ Configure the IP of your PC, make sure your PC and the switch in the same network segment.

▼ Link your PC and the switch, open the web browser on your PC and enter the IP address 192.168.0.253 in the browser address bar.

▼ A login window will appear, use the following credentials:

Username: superuser

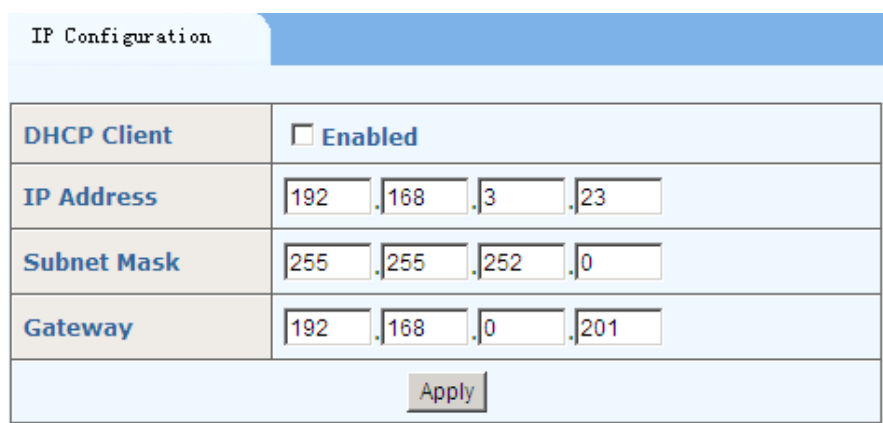
Password: 123

▼ Click “Administration and IP Configuration” in the left menu.

▼ The switch supports DHCP and Static IP.

- DHCP: Enable the DHCP Client by checking the Enabled checkbox. Of course, the switch must link a DHCP server at the same time. Click “Apply”.

- Static IP: Specify the IP Address, Subnet Mask, and Gateway. Click “Apply”.



The screenshot shows a web interface titled "IP Configuration". It contains a table with the following fields:

DHCP Client	<input type="checkbox"/> Enabled
IP Address	192 . 168 . 3 . 23
Subnet Mask	255 . 255 . 252 . 0
Gateway	192 . 168 . 0 . 201

Below the table is an "Apply" button.

▼ Save configuration: Click “Save Configuration” in the left menu.

## 5 · **Configuring 802.1 Q VLAN**

There is a default VLAN group with VID of 1, each port is a untagged member of this group.

▼ Creating a new VLAN group: Enter the page of 802.1Q VLAN, specify a VID and a VLAN Name. Up to 256 VLAN groups can be created, and each VLAN group can have an ID number from 1 to 4094.

802.1Q VLAN      802.1Q Configuration      802.1Q Port

**802.1Q VLAN Setting**

VID	<input type="text" value="2"/>
VLAN Name	<input type="text" value="vlan2"/>

Then the new VLAN group will be listed in the VLAN List of the bottom of this page.

802.1Q VLAN      802.1Q Configuration      802.1Q Port

**802.1Q VLAN Setting**

VID	<input type="text" value="1"/>
VLAN Name	<input type="text"/>

**VLAN List**

VID	Status	VLAN Name	Modify	Delete
1	Static	Default	-	-
2	Static	vlan2	<input type="button" value="Modify"/>	<input type="button" value="Delete"/>

You can also modify or delete the VLAN group.

▼ Adding VLAN group member ports: Enter the page of 802.1Q Configuration, select a created VLAN group (VID), add member ports. There are four types of port:

- Tag: The port is a tagged VLAN member of the VLAN group. Packets forwarded by the port are tagged.

- Untag: The port is an untagged VLAN member of the VLAN group. Packets forwarded by the port are untagged.

- Exclude: The port is excluded from the VLAN group. However, the port can be added to the VLAN group by GARP.

- Forbidden: The port is not allowed to be added to the VLAN group, neither GARP.

802.1Q VLAN      802.1Q Configuration      802.1Q Port

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**802.1Q VLAN Configuration**

VID:

VLAN name:

Port	Ethernet0/										Ethernet1/			
	1	2	3	4	5	6	7	8	9	10	1	2	3	4
Tag	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Untag	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exclude	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Forbidden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

▼ Configuring VLAN group member ports: Enter the page of 802.1Q Port. There are three parameters for you to configure each port.

- PVID: Each port can have only one Port VLAN ID (PVID). The untagged packets will be tagged a VID of PVID when arriving at the port. The default PVID is 1 for each port.

- Link Type: The drop-down list contains Access, Trunk and Hybrid.

- Access port: An Access port must be an untagged port, and it has only one VLAN group, Its VID is PVID not be modified.

- Trunk port: An untagged trunk port has only one VLAN group, but a tagged trunk port can have multiple VLANs.

- Hybrid port: An untagged or tagged Hybrid port has multiple VLANs.

- Frame Type: Specifies how the port accepts packet.

- Admit All: The port accepts tagged and untagged packets.

- Admit Only Tagged: The port accepts only tagged packets.

802.1Q VLAN    802.1Q Configuration    802.1Q Port

Port	PVID	Link Type	Frame Type
Ethernet0/1	1	Hybrid	Admit All

Apply

Link Type dropdown menu:  
 Hybrid  
 Access  
 Trunk

**Port Status**

Port	PVID	Link Type	Frame Type
Ethernet0/1	1	Hybrid	Admit All
Ethernet0/2	1	Hybrid	Admit All
Ethernet0/3	2	Hybrid	Admit All
Ethernet0/4	1	Hybrid	Admit All
Ethernet0/5	1	Hybrid	Admit All
Ethernet0/6	1	Hybrid	Admit All

▼ save configuration: Click “Save Configuration” in the left menu.

## 6 · Connecting the data lines

You can connect terminal switches and other segments at the ports of the switch via twisted pair cables and fibers. There are two types of interfaces.

▼ Fiber Ports: 1000Base-X (SFP slots), 100Base-FX.

▼ RJ45 Ports: 10/100Base-TX auto negotiation.

Connect the data lines according to your requirements.