WoMaster

Quick Installation Guide

Industrial 10-port Full Gigabit L2 Managed PoE Switch 8x802.3at/af PoE, Booster PoE

DP410L-LV Series

www.womaster.eu

· Overview

DP410L series is designed for industrial environments requiring high quality fiber communication such as industrial automation, road traffic control, etc. DP410L provides 8-port RJ45 802.3at/af PoE+ and 2-port SFP for multi-port Giga PoE switch requirement. DP410L accepts 24V power input, the wide available input voltage is range from 12-57V. For PoE ports, each port can deliver up to 30W power consumption and totally 120W of the system at 24V input. Full Gigabit capability and rugged industrial design ensures system high performance and reliability in harsh environments. For convenient traffic control and zero packet loss data transmission, DP410L offer contemporary management and security functions.

Model Name	Description
DP410L-LV	Industrial 10-port Full Gigabit L2 Managed PoE Switch, 2GSFP+8GT PoE+

· Package Checklist

- ✓ 1 x Product Unit (Without SFP Transceiver)
- ✓ 2 x 4-pin Removable Terminal Connector
- ✓ 1 x Attached Din Clip
- ✓ 1 x Quick Installation Guide

Optional Accessory (please refer to the Datasheet)

· Installation

DIN Rail mount
To mount the switch on the DIN Rail track, insert the upper end of the DIN-Rail clip into the back of the DIN-Rail track from its upper side and lightly push the bottom of the DIN-Rail clip into the track. The DIN Rail should comply with DIN EN50022 standard. Using wrong DIN rail may cause unsafe installation.

← DIN Rail Clip
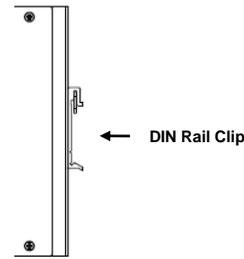
Grounding Screw
For avoiding system damage by noise or electric shock, establish a direct connection between the ground screw and the grounding surface prior to connecting devices.
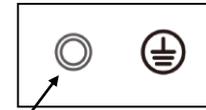
Grounding Screw

Wiring the Digital Input
To wire the DI on the Terminal block, loosen screws by screw driver on the terminal block connector, insert the positive and negative wires into the V+ and V- contact and then tighten screws after the DI wire is connected.

DI
+ -
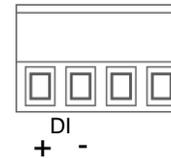
Wiring the Relay Output
The relay output of the 2-pin terminal block connector are used to detect user-configured events. The two wires attached to the fault contacts form a close circuit when a user-configured event is triggered. If a user-configured event does not occur, the fault circuit remains open.

DO
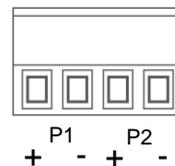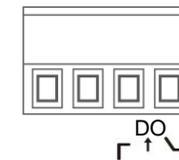
Wiring the Power Inputs
1) Insert the positive and negative wires into the V+ and V- contact on the terminal block connector.
2) Tighten the wire-clamp screws.
3) Connect the power wires to suitable DC Switching type power supply. 24VDC Booster(12~57VDC to 54V PoE Output).

P1   P2
+   - +   -

Console/Reset Port
The switch provide Reset and RS232 console for configuration. The default baud rate setting is 115,200, N, 8, 1.
Reset button allows you to reset switch or reload to factory default (>7 sec).

Reset   Console
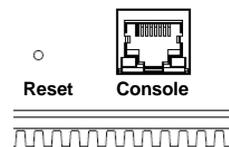
Baud Rate: 115200 /
Parity: None / Data Bit: 8 / Stop Bit: 1

· DP410L Appearance

Front

System LED
• 2 x Power
• 1 x DO/Alarm

SFP Port
2-port SFP
100/1000M

Copper Port
8-port RJ-45
10/100/100M
802.3at/af
compliant PoE+

Digital In/Output
2 pin Digital Input
2 pin Digital output
DI   DO
+ -   + -

Power Input
2 x 4 pin
terminal block
P1   P2
V+V- V+V-

DIN Clip

Bottom

Reset   RS232   Ground
         Console
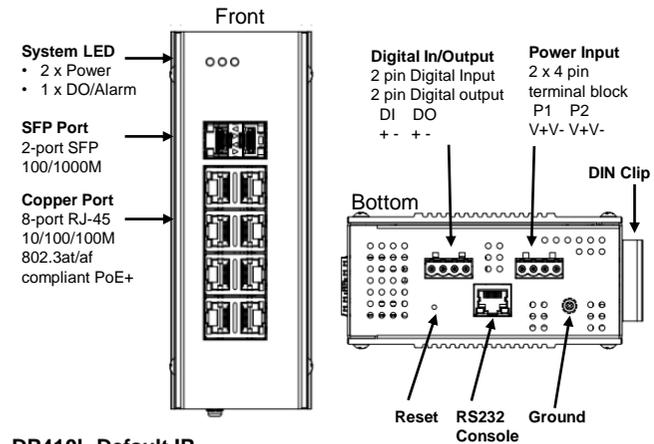
DP410L Default IP

Interface	Media	WEB GUI	DP410L
1 ~8	Copper RJ45	1~8	192.168.10.1
9~10	Fiber SFP	9~10	

· LED Indication

LINK/ACT

DO P2 P1

PoE status

RJ45

LINK/ACT
LINK SPEED
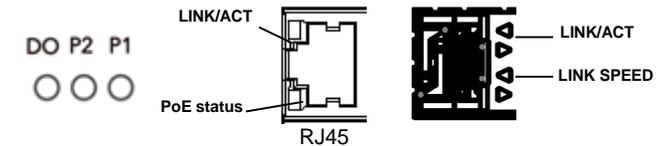
LED	Status	Description
PWR (P1/P2)	Green On	DC-IN Power is On
	Off	No Power in DC-IN
Alarm (DO)	Red On	Any failures in port link, ping, power, DO and DI State by SW control
	Off	No failure occurs
RJ45 Port	Green On	Links established
	Green Blinking	Packets transmitting/receiving
	Green Off	Link is inactive
	Amber On	PoE power feeding
	Amber Off	PoE power not feeding
SFP Port	Green On	Links established
	Green Blinking	Packets transmitting/receiving
	Green Off	Link is inactive
	Amber On	Link Speed 1000M
	Amber Off	Link Speed 100M

· Management

This device supports both in-band and out-of-band network management. The user can either configure the device through the user friendly Web/HTTPS management or remotely manage the device through the network by console management or Telnet/SSH.

1. Preparation for **Web management**: First of all, verify that device is properly installed in the network and that every PC of this network can access the switch through the web browser (Google Chrome, Internet Explorer or Mozilla Firefox).

- Type **http://IP_address** in your browser (the default IP address is **http://192.168.10.1/**)
- Key in the user name and password in login screen. The default user name and password is **admin**.
- After you click OK, the Welcome page of the web-based management interface will appear.
- On the left side you can see the list of software features, on the right side – available settings.
- ◆ To link with the device, please make sure that the IP Address of the PC is located in the same subnet (**192.168.10.x**).

2. Preparation for **Console management (RS232 Console port)**:
- Connect console cable between your PC and the device.
- Start -> Program -> Accessories -> Communication -> Hyper Terminal.
- Give a name to a new console connection.
- Choose the COM name and select correct serial settings: Baud Rate: 115200 / Parity: None / Data Bit: 8 / Stop Bit: 1
- After connected, type the username **admin** and password **admin** to login.
- Follow the User Manual to configure the software features.

· Quick PoE Configuration

- Login to the web GUI, select PoE to inspect and configure the PoE port settings. For detail configuration, please refer to the chapter **3.1.16 PoE** of the user manual. In this QIG, we will explain quick and easy configure steps.
1. Under normal circumstances, the 802.3at/af compliant Powered Device(PD) can be automatically determined, and the switch can determine the connected PD by its power "Class". You only need to **allocate Power Budget** for the switch's ports, and **enable PoE feature** for all ports or the specific ports.
2. The following is the screen of **Power over Ethernet Configuration – PoE Power Supply Configuration.** Type the PoE budget of the column of Primary Power Supply, and then click "**Submit**".

PoE Power Supply Configuration

Primary Power Supply [W]
120

Power Input	10-18 V ⎓ 8.27A	19.2-54 V ⎓ 7.31A	55/56/57 V ⎓ 2.5A
PoE Output (Max.)	54 V ⎓ 60W	54 V ⎓ 120W	55/56/57 V ⎓ 120W

· Quick PoE Configuration (Cont.)

3. The easy way is to keep the default settings and enable **PoE+** (802.3at/af) for all ports. The PoE+ stands for the 802.3at version, which is backward compatible with 802.3af PoE.

PoE Port Configuration

Port	PoE Mode	Priority	Maximum Power [W]
*	PoE+ ▾	<> ▾	0
1	PoE+ ▾	Low ▾	0
2	PoE+ ▾	Low ▾	0
3	PoE+ ▾	Low ▾	0
4	PoE+ ▾	Low ▾	0
5	PoE+ ▾	Low ▾	0
6	PoE+ ▾	Low ▾	0
7	PoE+ ▾	Low ▾	0
8	PoE+ ▾	Low ▾	0

Submit | Reset

4. **PoE Status:** After submission, the PoE+/PoE ports are enabled and start to detect the PD and deliver power. You can view the current status of the connected PDs through the "**Monitor**" -> "**PoE**". The web GUI will show the connected PD ports, and how much power is allocated and used.
5. After configured, please remember to **save the PoE configuration permanently to startup-config.** Even if you reboot/cold start the switch, the settings will be permanently saved and activated.
6. Go to Maintenance -> Configuration -> Save startup-config. Click "**Save Configuration**".

```
▶ Configuration          Save Running Configuration to startup-config
▶ Monitor
▶ Diagnostics            Please note: The generation of the configuration file may be
▾ Maintenance            time consuming, depending on the amount of non-default
  ▪ Restart Device       configuration.
  ▪ Factory Defaults
  ▶ Software             Save Configuration
  ▾ Configuration
    ▪ Save startup-config
    ▪ Download
    ▪ Upload
    ▪ Activate
    ▪ Delete
```

7. ❓ Click "**Help**" button, the popup window shows explains how to configure the feature.

· Safety Precautions

➢ Turn off DC power input source before connecting the DC Power supply module to the terminal block connectors. Do not turn-on the source of DC power module and make sure all connections were well established, then power on the DC source to powering the switch device.
➢ The switch must be installed at Restricted Access Locations, such as control room/control cabinet. The switch is designed for in building installation only and is not intended to be connected to exposed (outside plant) networks.
➢ Never install or work on/with the equipment or the cabling during the period of its lightning activity.
➢ The DIN Rail should comply with DIN EN50022 standard. Using wrong DIN rail may cause unsafe installation.
➢ **Do not touch the surface of the switch while it is performing PoE function!**

· Warranty

5-year Global warranties are available for WoMaster products assuring our customers that the products shall remain free from defects in workmanship or materials and conform in all material respects to WoMaster specifications, or Purchaser's supplied and accepted specifications. The warranty is limited to the repair and/or replacement, at WoMaster' sole discretion, of the defective product during its warranty period. The customer must obtain a **Return Merchandise Authorization (RMA)** approval code prior to returning the defective Product to WoMaster for service. The customer agrees to prepay shipping charges, to use the original shipping container or equivalent, and to insure the Product or assume the risk of loss or damage in transit. Repaired or replaced products are warranted for ninety (90) days from the date of repair or replacement, or for the remainder of the original product's warranty period, whichever is longer.

· Support

At WoMaster, you can use the online service forms to **request the support**. The submitted forms are stored in server for WoMaster team member to assign tasks and monitor the status of your service. Please feel free to write to **help@womaster.eu** if you encounter any problems.

· Disclaimer

WoMaster reserves the right to make changes to this QIG or to the product hardware at any time without notice. It is the user's responsibility to determine whether there have been any such updates or amendments herein.

Defects, malfunctions, or failures of the warranted Product(s) caused by damage resulting from unforeseeable incidents (such as lightings, floods, fire, etc.), environmental and atmospheric disturbances, other external forces such as power line disturbances and surge, host computer malfunction and virus, incorrect power input, or incorrect cabling, incorrect grounding and damages caused by misuse, abuse and unauthorized alteration or repair are not warranted.

WoMaster www.womaster.eu