Power Boost PoE Switch on BUS

DP210
Industrial 8+2G Unmanaged PoE Switch

DP210 is an industrial 10-port unmanaged Ethernet switch that provides 8-port Fast Ethernet, IEEE 802.3af compliant PoE technology to enable devices when power sources are not available.

Tailored design to boost from 8~32V to 48V powers vehicle applications that require low voltage system power input. Besides, the switch is equipped with QoS feature and additional 2-port Gigabit Ethernet uplink; prioritized stream such as video and VoIP are also optimized.

FC CE UL EN50121-4

## Features & Benefits

High Throughput Ethernet Switching
· 10-port Ethernet, including 8-port Fast Ethernet PoE and 2-port **Gigabit** Ethernet
· 2-port **Gigabit** Ethernet uplink features QoS for video and VoIP data stream
· 8K MAC address table
· Stores and forwards with non-blocking switch fabric

Extreme PoE Capability
· 8-port IEEE 802.3af compliant PoE technology, up to 15.4W per port
· Full power budget: Max. 120W@70℃/24VDC system PoE power budget
· Low voltage 8VDC input to deliver 60W@70℃ output

Rugged Design with Power Booster
· Robust design protects from mechanical deformation
· Ribbed side panels for effective heat dissipation
· **8~32V** wide power input range design with **booster** to deliver 8-port PoE at **48V** for vehicle applications
· Wide operating temperature range **-40 ~ 70℃**
· Selectable gigabit uplink: RJ45 or SFP for high flexibility of selecting cable types and distances
· CE marking
· IEC61000-6-2/IEC61000-6-4 heavy industrial EMC
· **EN50121-4** railway trackside EMC
· Meet ESD/Surge Severity Level 3 Criteria A requests, no traffic loss during and after the test
· Emission: CISPR 22/ FCC part 15B class A
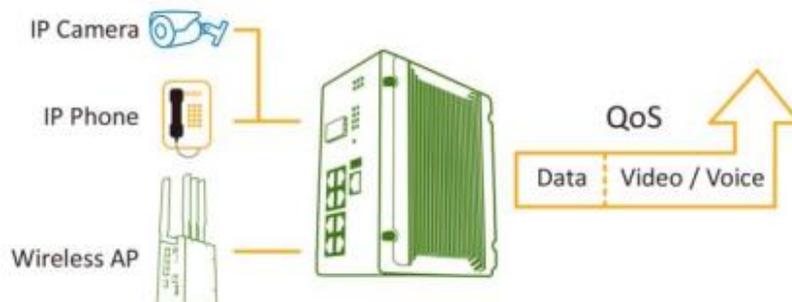
Interfaces

DIP Switch
· Ethernet port fail alarm

Integrated Power Connector
· 1 x 4 pin terminal block
  2 pin for power input
  2 pin for DO alarm
· Easy installation

Chassis Ground

Dual Gigabit Uplink
· 2-port 10/100/1000Base-T

Din Clip

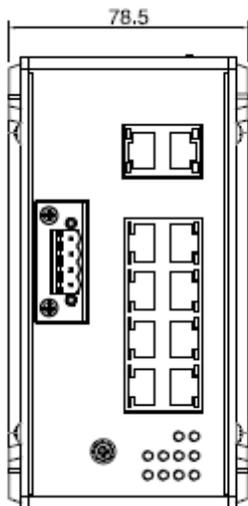**IEEE 802.3 af PoE**
· 8-port 10/100Base-TX

System LED

Dimensions

(mm)

78.5

125

52

45.65

35.5

67.85

149

130

Top

Bottom

⚙ Specifications
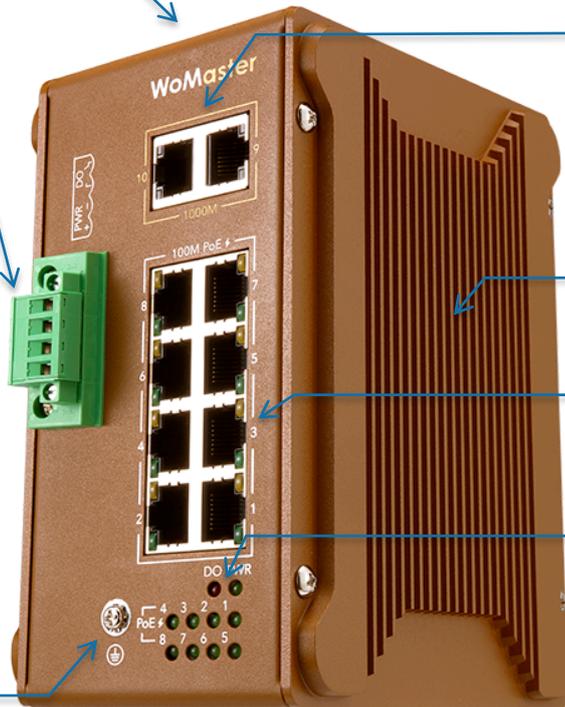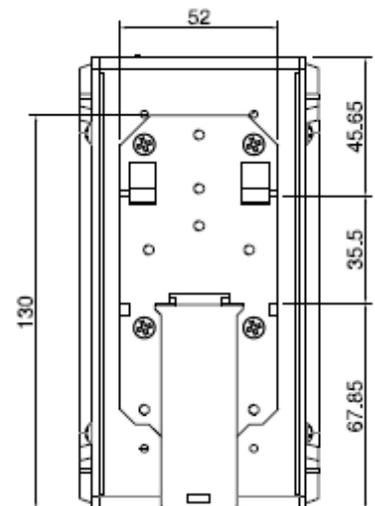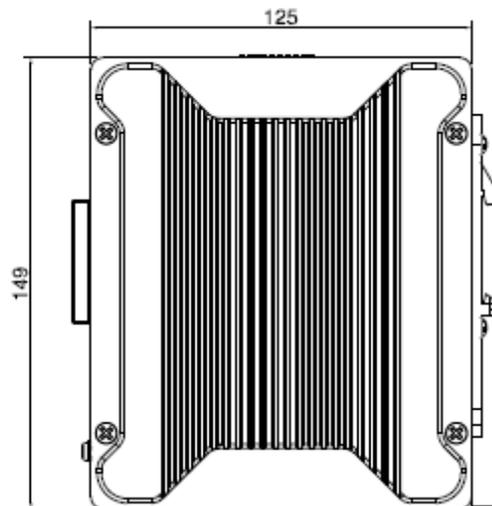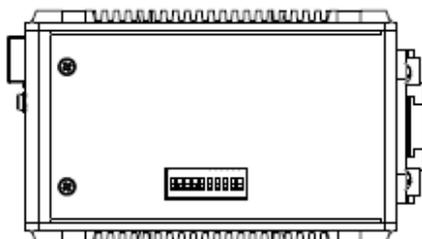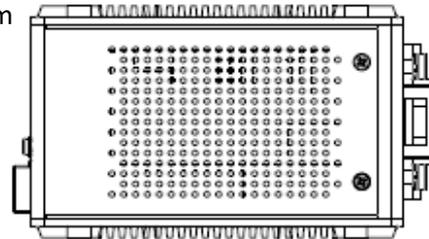
Technology	
Standard	IEEE 802.3 af Power Over Ethernet
	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3ab 1000Base-T Gigabit Ethernet copper
	IEEE 802.3x Flow Control and back-pressure
	IEEE 802.1p Class of Service (CoS)

Performance	
Switch Technology	Store and Forward Technology with Non-Blocking Switch Fabric
Number of MAC Address	8K
Packet Buffer Memory	1M bits
Transfer performance	10Base-T: 14,880pps, 100Base-TX: 148,800pps, 1000Base-TX: 1,488,100pps

Interface	
Ethernet Port	8 x 10/100Base-TX RJ45, Auto Negotiation 2 x 100/1000Base-T RJ45, Auto Negotiation
System LED	1 x Power: Green On 1 x DO: Red On 8 x PoE status: Green On
Fast Ethernet Port LED	Link (Green On), Activity (Green Blinking), Full duplex (Amber on), Collision (Amber Blinking)
Gigabit Ethernet Port LED	Link (Green On), Activity (Green Blinking), Speed (Amber Blinking, 10M:1, 100M:2 1000M:3 times)
DIP Switch	Ethernet Port Fail Alarm

Power Input, Digital Output	4-Pin Removable Terminal Connector
	  2 Pin for Power Input
	  2 Pin for DO: Dry Relay Output with 0.5A /24V DC

Power Requirement	
Input Voltage	12/24VDC(8~32VDC)
Reverse Polarity Protect	Yes
Input Current	6.11A@24V
Power Consumption	Max 10.56W@ 24VDC full traffic without PD loading, suggest to reserve 15% tolerance

PoE	
Power forwarding mode	Alternative B
PoE Power Budget	System: Max. 120W@70°C/24VDC, Max.60W@70°C/8VDC Per Port: Max. 15.4W
PoE Standard	IEEE 802.3af

Mechanical	
Installation	DIN Rail
Enclosure Material	Steel Metal with Aluminum
Dimension	78.5(W) x 149(H) x 125(D) mm / without DIN Rail Clip
Ingress Protection	IP30
Weight	1.3KG (device) / 1.7KG (full package)
Package	240(W)x200(L)x130(H)mm (package) 16pcs / carton 410(W)x 550(L)x490(H)mm (1.5KG)

Environmental	
Operating Temperature & Humidity	-40°C~70°C , 0%~95% Non-Condensing
Storage Temperature	-40°C~80°C
MTBF	>200,000 hours
Warranty	5 years

Standard	
Safety	EN60950-1 Compliance
EMC	EN61000-6-2/EN61000-6-4
EMI	CISPR 22, FCC part 15B Class A
EMS	EN61000-4-2 ESD: 8KV(Air), 6KV(Contact) Criteria A EN61000-4-3 RS: 20V/m(80M~1GHz), 10V/m(1.4G~2.1GHz), 5V/m(2.1G~2.5GHz) EN61000-4-4 EFT: 2KV (Power, Signal Port, GND) EN61000-4-5 Surge: Power: 2KV/1KV(Line to Ground/Line to Line), Signal Port: 2KV(Line to Ground) Criteria A EN61000-4-6 CS: 10Vrms(Power, Signal Port) EN61000-4-8 Magnetic Field: 30A/m continues /300A for 1~3s
Railway	EN50121-4

Model Name	Description
DP210	Industrial 8+2G Unmanaged PoE Switch
DP210-2F (By Request)	Industrial 8+2G Unmanaged PoE Switch, 2 SFP

Package List
1 x Product Unit
1 x 4-pin Removable Terminal Connector
1 x Attached Din Clip
1 x Quick Installation Guide

Optional Accessory

Item	
MK-D1-2	Wall-mounting kit with 2 plates and 8 screws
PSD240-12 PSD240-24	240W/12VDC DIN-rail power supply 240W/24VDC DIN-rail power supply