Rugged Switch for Transportation



DS210

Industrial 8+2G Unmanaged Ethernet Switch

DS210 is an industrial 10-port unmanaged Ethernet switch that provides 8-port Fast Ethernet for economical solution to industrial Ethernet connection. 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 IEC61000-6-2 IEC61000-6-4 EN50121-4

Features & Benefits

High Throughput Ethernet Switching

- 10-port Ethernet, including 8-port Fast Ethernet 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

Rugged Mechanical Design

- Robust design protects from mechanical deformation
- Ribbed side panels for effective heat dissipation
- Wide operating temperature range **-40 ~ 70℃**
- Selectable gigabit uplink: RJ45 or SFP by model for high flexibility of 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

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

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



Din Clip

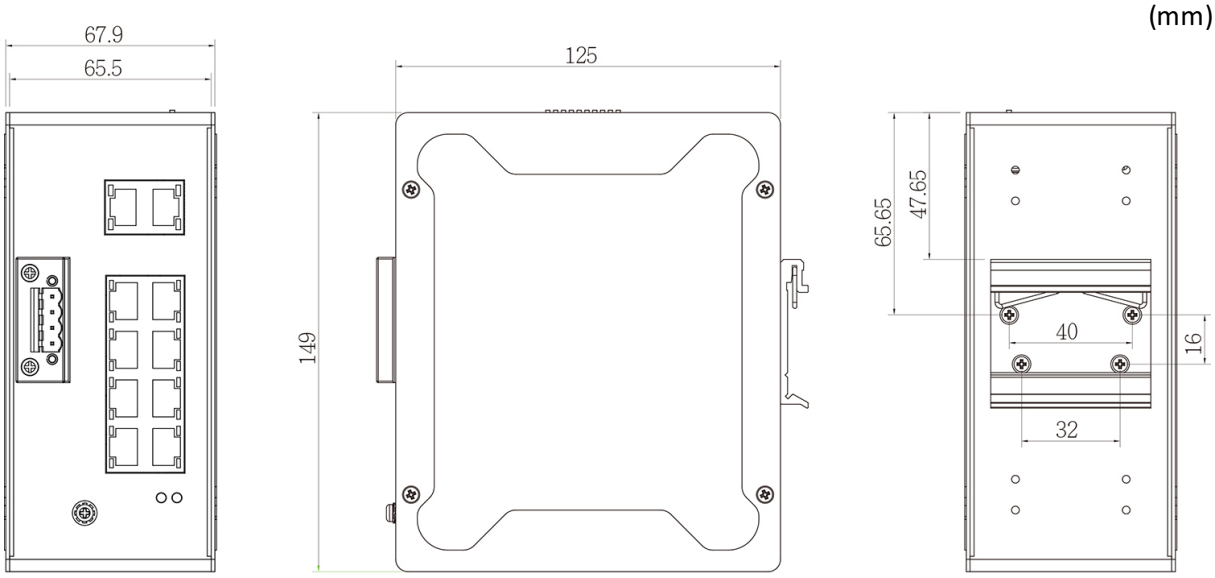
8-port 10/100Base-TX

System LED

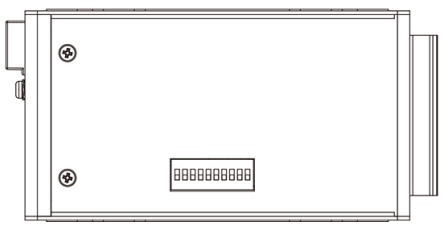
Chassis Ground

Dimensions

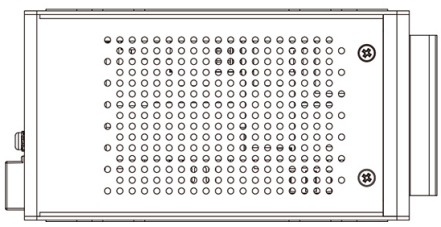
(mm)



Top



Bottom



Specifications

Technology	
Standard	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
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	0.37A@24V
Power Consumption	Max 8.88W@24VDC full traffic, suggest to reserve 15% tolerance
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

Ordering Information

Model Name	Description
DS210	Industrial 8+2G Unmanaged Ethernet Switch
DS210-2F (By Request)	Industrial 8+2G Unmanaged Ethernet 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
PSD20-24	20W/24VDC DIN-rail power supply
PSD40-24	40W/24VDC DIN-rail power supply

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