

DES1005

Industrial Ethernet Switch

4x10/100Base-TX(PoE) to 1x10/100Base-TX/FX



Overview

DES1005 series Industrial Ethernet Switch adopts store-and-forward architecture, fan-less and energy-saving design to provide reliable and stable operation in harsh industrial environments.

All the switches support 12-58Vdc dual power input and operate at temperature of -30 ~ 75°C.

The PoE models comply with IEEE 802.3af/at standard, 48~58Vdc dual power input. While using standard Cat5/5e/6 cables that carry Ethernet data, the switch can also provide power to Powered Devices, such as VoIP phones, video cameras, wireless access points, alarms, traffic controllers, sensors, and tracking devices.

The full series is widely used in intelligent transportation(ITS), Safe City, New Energy, mining plants, water conservancy, electric power systems, and other industrial scenes.

Features

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX Ethernet standard
- Supports auto negotiation and 10/100Mbps half / full duplex mode for each copper port
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- Automatic address learning and address aging
- 12~58Vdc redundant power input with polarity reverse protection
- IP-40 protection aluminum alloy case for rapid heat dissipation
- DIN rail and wall-mount design
- 6Kv surge protection for power port and copper port
- 8Kv/15Kv ESD protection
- Low power consumption
- CE/FCC/RoHS compliance

Technical Specifications

Model	DES1005-5T(4T1S)	DES1005-4P1T(4P1S)
Performance		
Standard	IEEE802.3 10Base-T IEEE802.3u 100Base-TX and 100Base-FX IEEE802.3x Flow control and back pressure	
Processing type	Store and Forward	
Switch Capacity	1Gbps/non-blocking	
Packet forwarding Rate	0.744Mpps	
MAC address	2Kbit	
Buffer Space	512Kbit	
Max. packet length	2048bits	
Interface		
Copper port	10/100M Auto-negotiation, RJ45 Auto-Cross for MDI/MDIX Cat5/Cat5e/Cat6, ≤100m	
Fiber port	155M SFP OS1/OS2 ≤120km; OM1/OM2 ≤550m/2km	
Power Port	Terminal Block	
LED indicators	Power, Speed, Link/Act, PoE, Fiber	
PoE Function		
Standard	/	IEEE802.3af/at
Pin Assignment	/	1/2(+), 3/6(-)
PoE Budget	/	≤120W
Electrical characteristics		
Input Voltage	12~58Vdc	48~58Vdc
Power Consumption	<3W	<123W
Physical characteristics		
Enclosure	IP40 , Aluminum Alloy	
Installation	DIN-rail (default); Wall-mounted, Rack-mounted (Optional kits)	
Dimension	115x81x34.5mm	
Weight	310g	
Environment		
Working Temperature	-30 °C ~ +75 °C	
Relative Humidity	5-95% (no condensation)	

Order Information

Model	Description
DES1005-5T	10/100M 5-port
DES1005-4T1S	10/100M 4-RJ45, 1-SFP slot
DES1005-4P1T	10/100M 4-RJ45 (PoE), 1-RJ45
DES1005-4P1S	10/100M 4-RJ45 (PoE), 1-SFP slot
Note: AC/DC power supply purchased separately	

Related Products

Model	Description
DIN-rail Power supply	
HDR-15-24	DIN-rail 15W, 85~264Vac input, 24V0.63A output
NDR-75-48	DIN-rail 75W, 90~264Vac input, 48~55Vdc output
NDR-120-48	DIN-rail 120W, 90~264Vac input, 48~55Vdc output
SFP Module	
SFP-M1585L-02I	155M MM 850nm LC 550m DDM, Industrial Grade
SFP-M1513L-02I	155M MM 1310nm LC 2km DDM, Industrial Grade
SFP-S1513L-20I	155M SM 1310nm LC 20km DDM, Industrial Grade
SFP-S1535L-20I	155M SM TX1310/RX1550nm LC 20km DDM, Industrial Grade
SFP-S1553L-20I	155M SM TX1550/RX1310nm LC 20km DDM, Industrial Grade
Long distance 40/60/80/100/120km is available	
Installation Accessories	
TK12	Wall-mounted kits, 118*18*16mm, ϕ 3.5mm L=12mm
A02	Side DIN-rail mounted kits, 72.7*70*8.5mm, ϕ 3.5mm L=6mm
CK01	Rack-mounted bracket with Din-rail, 483*215*130mm



TK12 Wall-mounted kits

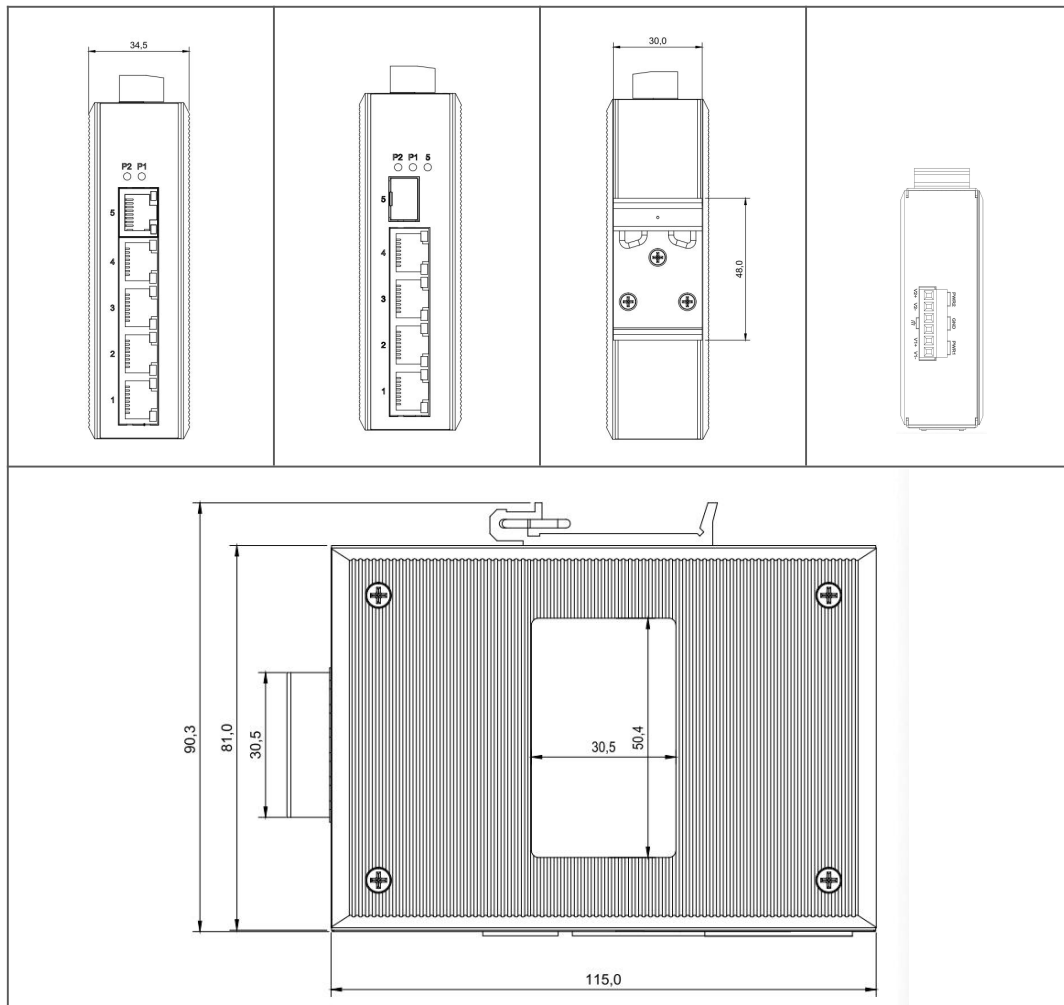


A02 Side DIN rail mounted kits



CK01 Rack-mounted bracket

Structure diagram (mm)



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