We Connect The World

User's Manual

8/16/24 Port Giga Switch

TEG1008S/1016S/1024S

VER:1.0

Manufacturer：shenzhen Tenda Technology Co.,ltd
Address: Xixing Industrial Zone,Nanshan District,Shenzhen,P.R.CHINA
FAE: +86-755-27657180
Postcode: 518108
Website: http:// www.tenda.cn

Copyright Statement

Content

1. Product Specification..

TEG1008S/1016S/1024S Giga Switch is designed to resolve the Enterprise and Internet Coffee Data transferring Bottle-Neck,it has 8/16/24 10/100/1000Mbps Auto-Negotiation Ethernet ports, supports Auto MDI/MDI-X function. These Giga ports can be used as normal port, as were as Uplink port to connect backbone network. Customer can replace the 100Mbps switch by a TEG1008S/1016S/1024S to resolve the server terminal connectivity bottleneck issue. Customer can access the Giga switch into the Enterprise and Internet Coffee as a prime switch to improve the speed between different departments or Servers. It ' s a excellent function and reasonable price Giga switch .

1.1 Article list

Check the articles carefully after you open the packing as below:

- ✓ 1 piece 8/16/24 Giga Port Fast Ethernet switch.
- ✓ 1 piece Power Cable.
- ✓ 1 pair " L " nog , 8 pieces screw, 4 pieces rubber pads.
- ✓ 1 piece User ' s manual .

1.2 Switch front panel and back panel specification

8/16/24 Giga Port Fast Ethernet switch front panel includes RJ45 area in the right side and situation LED Indicator in the left side area.
8/16/24 10/100/1000Mbps RJ45 port.
Each 10/100/1000 port has 1 LINK/ACT indicator, 1 100M indicator, 1 Power indicator in the front panel.
Back plane has a 1AC power port, used for AC power input.

1.3 LED Indicators Specification:

The LED indicators of the Switch include Power、Link/ACT and 100M. You can know the switch ' s work situation through these LED Indicators.
The following shows the LED indicators for the

Switch along with explanation of each indicator.

LED Indicator	Color	Status	Description
POWER	Green	Light	This indication on when the Switch is turned on
	—	Off	If this indicator is not lighting, check the AC power connector to ensure proper connectivity of the power cable and the switch.
LINK/ ACT	Green	Light	The other device connects to the port of the Switch.
	Green	Blinking	The port is transmitting or receiving data
100M	Green	Light	The switch connects the other device at 100Mbps speed.
1000M	Green	Light	The switch connects the other device at 1000Mbps Speed.

Remark: 1.100Mbps indicator described above is optional.
2.100/1000M port may blinking together with Link/Act when it transfer data.

1.4 Features

TEG1008S/1016S/1024S Giga switch has High speed dynamic memory, support packet store and forward function. TEG1008S/1016S/1024S Giga switch combined store and forward function and dynamic memory to make sure sending the packet to each port from the memory effectively. Support IEEE802.3x Full Duplex and Half Duplex backpressure flow control. Control the data flow

between the sending and receiving nodes to prevent any possible packet loss. It Supports auto-negotiation function, detect the network connectivity such as 10M/100M half duplex, full duplex ,1000M full duplex work model. No need manual set, plug and play. The speed at each Port can up to 2000M. It ' s the best choice for upgrading from the normal 10/100M LAN to 1000M powerful function network , makes reality the compatibility and no slot connection among the 10M,100M,
1000M.

1.5 Technology parameter

Features	
Sstandard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-TX/FX Fast Ethernet IEEE802.3 ab Giga byte Ethernet standard.
Protocol	CSMA/CD
Topological structure	Star
Network Cable	10BASE-T: Cat3 UTP or above 100BASE-TX: Cat5 UTP /STP 1000Base-T: Cat5 , Cat5e or Cat6 UTP/STP
Port Quantity	8/16/24 10/100/1000Mbps ports ,
Performance	
Forwarding Model	Fast store and forwarding
MAC Address Table	8K

Packet Filtering/ Forwarding Rate	14880pps (10Mbps) per port
	148800pps (100Mbps) per port
	1488000pps (1000Mbps) per port
MAC Address Learning	Auto-learning, auto-aging.
Physical and Environment function	
POWER	External Powerful Work power adapter
Temperature	Operation: 0 ℃~50 ℃ Storage: -30 ℃~60 ℃
Humidity	5%~95% no coagulation
AC INPUT	AC100~240V 50/60Hz
POWER	5W-20W Watts maximum
Physics and Environment features	Operation: 0 ℃~45 ℃ Storage: -30 ℃~60 ℃
Humidity	5%~95% no coagulation

Performance Function

- Compliance to the IEEE802.3、IEEE802.3u、IEEE802.3ab Ethernet Protocol , support 10/100/1000Mbps 3 kinds transfer model together.
- Supports NWAY auto-negotiation function, detect speed, duplex, flow control automatically, can choose the best network connectivity model automatically, Avoid the complex setting procedure. Support the PNP.
- Auto MDI/MDIX functions; predigest the network span and maintenance.
- Support IEEE802.3x duplex control, half duplex Backpressure control.
- As high as16/32/48Gbps backboard bandwidth, support Non-blocking wire-speed forwarding.

- Use the store-transfer frastructure, support MAC address auto-learning function, integrated 8K MAC address table.
- Internal Powerful function Power supplier, the 16/24 ports Switch ' s are 19 inches standard steel bracket structure.(TEG1008S is 9 inches standard steel case)

2. Installation

TEG1008S/1016S/1024S Support the desktop and mount installation, please fix the rubber pads on the case bottom to prevent the case from being scraped. Please be careful the following during the installation:

- Don ' t put heavy article in the switch.
- Convenience receptacle and equipment should be within 1.5 meters.
- Check power supply is confirmed the safe Connection.
- Make sure there ' s enough ventilation through whom can dissipate heat well.

16/24 giga switch can fixed into 19 inches bracket , please use the 2 pieces screws to fix the " L " nog into the two sides of the front panel of the switch, then fix the switch in the proper position in the bracket by the " L " nog, Please also tie all the other screws attached for safety consideration.

2.1 Switch to PC

A PC can be connected to the TEG1008S/1016S/1024S switch via Category 5/Cat5E UTP/STP cable, because the switch has the MDI/ MDI-X function. PC can connect any port of the TEG1005/1008 via Parallel or crossing cable without necessity of distinguishes of Parallel and Crossing cable.

2.2 Switch to HUB

A 10Base-T/100Base-TX HUB can be connected to the TEG1008S/1016S/1024S Giga
Switch via Cat5/Cat5E UTP/STP cable, because the Giga switch has the MDI/ MDI-X function, you can connect any port of the Giga switch from the Uplink port (MDI-II) of the HUB or the other ports

via parallel/crossing cable.

2.3 Switch to Switch

Similar to the connectivity between the HUB and Switch, you can uplink from any port of the TEG1008S/1016S/1024S to any port of the other switch via Cat5/Cat5E STP/UTP cable.

Notice: The TEG1008S/1016S/1024S Port Giga Switch has auto-negotiation function, the port indicator situation dependents on the work model negotiation result, the indicator situation specification is as the indicator specification described above. If the LED Indicators don't light after the connected , then you need to check if the other Network device and network cable are connected normally.

3. Appendix

◆RJ-45 PIN SPECIFICATION

When the TEG1008S/1016S/1024S work as 1000Mbps work mode, you will need to use all the 4 Pairs pin of the Cat5/Cat5e cable. Please match the Pin Pairs correctly; the following are the definition of the standard RJ-45 socket and connector:

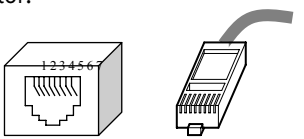

Figure 3.1 the standard RJ-45 Socket/connector

RJ-45 Connector pin definition	
Pin S/N.	Signature
1	A_TX + (sender)
2	A_TX - (sender)
3	B_RX + (receiver)
4	C_TX + (sender)
5	C_TX - (sender)
6	B_RX - (receiver)
7	D_RX + (receiver)

8	D_RX - (receiver)

◆Parallel and crossing cable

TEG1008S/1016S/1024S has auto MDI/MDI-X function, it can distinguishes the parallel and crossing cable automatically when you connect the switch to other device ; Meantime TEG1008S/1016S/1024S transfer automatically to make sure the fast connectivity and communication (From TD sending change to RD receiving , or From RD receiving to TD sending)

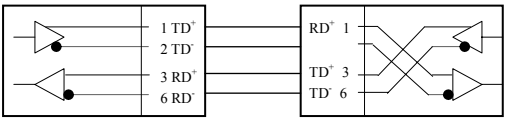

Figure 3.2 Connect to other switch/HUB via Parallel cable.

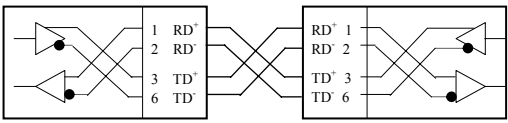

Figure 3.3 Connect to other switch/HUB via crossing cable