



1.0.0		
2.0.0		

ethtool

Supported link modes	full	1	
Supported link modes	half full		2
Auto-negotiation	on		
Auto-negotiation	off		

on

```
[root@localhost ~]# ethtool enp4s0f0
Settings for enp4s0f0:
  Supported ports: [ TP ]
  Supported link modes: 10baseT/Full
                        100baseT/Full
                        1000baseT/Full
  Supported pause frame use: Symmetric
  Supports auto-negotiation: Yes
  Supported FEC modes: Not reported
  Advertised link modes: 10baseT/Full
                        100baseT/Full
                        1000baseT/Full
  Advertised pause frame use: Symmetric
  Advertised auto-negotiation: Yes
  Advertised FEC modes: Not reported
  Speed: 1000Mb/s
  Duplex: Full
  Port: Twisted Pair
  PHYAD: 0
  Transceiver: internal
  Auto-negotiation: on
  MDI-X: Unknown
  Supports Wake-on: umbg
```

1

```
[root@localhost ~]# ethtool enp9s0f0
Settings for enp9s0f0:
  Supported ports: [ TP ]
  Supported link modes: 10baseT/Half 10baseT/Full
                        100baseT/Half 100baseT/Full
                        1000baseT/Full
  Supported pause frame use: Symmetric
  Supports auto-negotiation: Yes
  Supported FEC modes: Not reported
  Advertised link modes: 10baseT/Half 10baseT/Full
                        100baseT/Half 100baseT/Full
                        1000baseT/Full
  Advertised pause frame use: Symmetric
  Advertised auto-negotiation: Yes
  Advertised FEC modes: Not reported
  Speed: 1000Mb/s
  Duplex: Full
  Port: Twisted Pair
  PHYAD: 1
  Transceiver: internal
  Auto-negotiation: on
  MDI-X: on (auto)
  Supports Wake-on: pumbg
  Wake-on: g
  Current message level: 0x00000007 (7)
                        drv probe link
  Link detected: yes
```

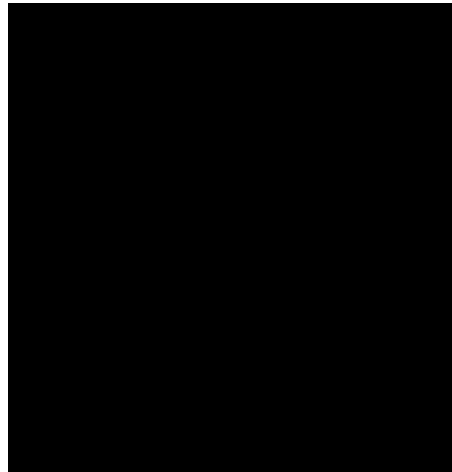
2

l350

link
ethtool

3

Advertised link modes
Speed link
Duplex: Full
Auto-negotiation off
link yes



3

1G autoneg off 10G autoneg off
10M 100M

ethtool -s ethx speed 10M/100 duplex full/half autoneg on/off

1

交换机 \ 网迅	Auto	10M Full on	10M Full off	100M Full on	100M Full off
Auto	1000F	10F	10F	100F	100F
1000F	1000F	NO Link	NO Link	NO Link	NO Link
10F	NO Link	10F	10F	NO Link	NO Link
100F	NO Link	NO Link	NO Link	100F	100F
1000F 10F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 100F	NO Link	NO Link	NO Link	NO Link	NO Link
10F 100F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 10F 100F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 100F 10F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 100F 100F	NO Link	NO Link	NO Link	NO Link	NO Link
10F 100F 100F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 10F 100F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 100F 10F	NO Link	NO Link	NO Link	NO Link	NO Link
1000F 100F 100F	NO Link	NO Link	NO Link	NO Link	NO Link

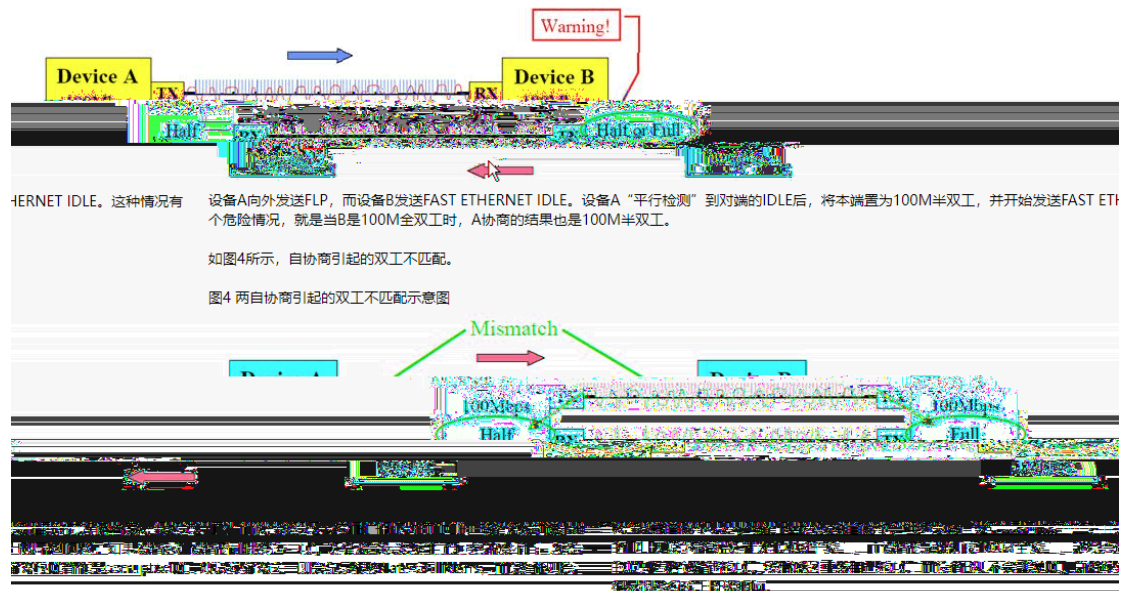
```

1          autoneg on                                duplex full autoneg on
  autoneg   link duplex full autoneg off duplex half autoneg on duplex half
autoneg off link
2          autoneg off                                autoneg duplex full autoneg off duplex
half autoneg on duplex half autoneg off link half
link , pause

crc error

```

如图3所示，一台自协商设备和100BASE-T设备互连。
图3 一台自协商设备和100BASE-T设备互连示意图



<https://wenwen.sogou.com/z/q705547943.htm>

<https://support.huawei.com/enterprise/zh/knowledge/EKB1000068108>