

Port Physical Characteristics Configuration

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Chapter 1 Port Physical Characteristics Configuration

1.1 Configuring the Ethernet Interface

1.1.1 Configuring Rate

The Ethernet rate can be realized through auto-negotiation or configuration on the interface.

Run the following command to configure the Ethernet rate:

Command	Purpose
Speed {10 100 auto} (T port) Speed {100 1000 auto} (SFP port)	Set the rate of fast Ethernet to 10M, 100M, 1000M or auto-negotiation.
No speed	Resume the default settings—auto-negotiation.

Note:

The speed of the optical interface is fixed. For example, the rate of GBIC and GE-FX is 1000M; the rate of FE-FX is 100M. If the **auto** parameter is behind the **speed** command, it means that you can enable the auto-negotiation function on the optical interface. Otherwise, you cannot enable the auto-negotiation function on the optical interface.

1.1.2 Configuring the Duplex Mode of an Interface

By default, the Ethernet interface can be auto, half duplex or full duplex. The gigabit combo SFP/TX ports does not support speed 1000 and compulsory duplex mode simultaneously.

Command	Purpose
duplex {full half auto}	Sets the duplex mode of the Ethernet.
No duplex	Resumes the default setting. The duplex mode is auto-negotiation.

1.1.3 Configuring Flow Control on the Interface

When the interface is in full-duplex mode, the flow control is achieved through the PAUSE frame defined by 802.3X. When the interface is in half-duplex mode, the flow control is achieved through back pressure.

Command	Purpose
flow-control {on off auto}	Enable or disable the flow control on the interface.
no flow-control	Resume the default settings. The default settings have no flow control.

Note:

The difference between “flow-control auto” and “flow-control on” is that the flow control frame is compulsory received. The flow control frame is forwarded when the peer negotiation is successful in “auto” mode.