

Interface Physical Characteristic Configuration



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Chapter 1 Interface Physical Characteristic Configuration

1.1 Configuring Ethernet Interface

The section describes how to configure the Ethernet interface. The switch supports interfaces of the 10Mbps Ethernet and the 100Mbps fast Ethernet. The detailed configuration is shown as follows. The first step is mandatory, while other steps are optional.

1.1.1 Selecting Ethernet Interface

Run the following commands in global configuration mode to enter the Ethernet interface configuration state:

Run...	To...
interface fastethernet [slot/port]	Enter the fast Ethernet interface configuration state.
interface gigaehternet [slot/port]	Enter the gigabit Ethernet interface configuration state.

Run **show interface fastethernet** to display the state of the fast Ethernet interface.
Run **show interface gigaehternet** to display the state of the gigabit Ethernet interface.

1.1.2 Configuring Rate

The Ethernet rate can be realized by auto-negotiation or by configuring it on an interface.

Run...	To...
Speed {10 100 1000 auto}	Set the rate of the fast Ethernet to 10M, 100M, 1000M or auto-negotiation.
No speed	Resume the default configuration. The rate is set to auto-negotiation.

Note:

The speed of SFP is fixed. For example, the speed of GBIC and GE-FX is 1000M, while the speed of FE-FX is 100M. If there is the **auto** parameter followed the SFP **speed** command, the auto-negotiation feature can be enabled. Otherwise, it is not negotiable. In default configuration, the auto-negotiation of the gigabit interface can be enabled, while the auto-negotiation of the 100Mbps interface is disabled.

1.1.3 Configuring Duplex Mode for Port

In default configuration, the Ethernet interface can be full-duplex or half-duplex by auto-negotiation. This command doesn't exist on gigabit interface. The duplex mode of gigabit interface is always **auto**.

Command	Description
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duplex {full half auto}	Sets duplex mode for the Ethernet.
No duplex	Resumes the default configuration. The duplex mode is set to auto-negotiation.

1.1.4 Configuring Interface Flow Control

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

Command	Description
flow-control on/off	Opens or closes the flow control of the interface.
no flow-control	Resumes the default configuration. There is no flow control on the interface.