

## OPT-6016 16-Ports GE SFP Fiber Switch

**CLI Manual** 

V1.1

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## Revision record

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V1. 0	The first official publish

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# 1 Manage access method

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Instruction:

The model supports Console manage access method. Default Management A/C: admin Default Management P/W: admin

## 1.1 Console Access

Note:



Please use the supplied serial management cable to connect.

Step 1: One side of the serial management cable connects to serial interface of a computer, and the other side connects to Console port of this model.

Step 2: Run Hyper Terminal of your windows system.

Step 3: Create a new connection, and enter an arbitrary name.

Connection Description	? 🛛
New Connection	
Enter a name and choose an icon f <u>N</u> ame: I	or the connection:
Icon:	8 🗐 🛞
	OK Cancel

Step 4: Select a proper port according to your actual situation.

Connect To	? 🛛
Switch	
Enter details for th	e phone number that you want to dial:
Country/region:	
Area code:	
Phone number:	
Connect using:	сом1 💌
	UK Cancel

Step 5: Port settings are as follows:

Distance	115000	
Bits per second:	115200	Y
<u>D</u> ata bits:	8	*
Parity:	None	*
<u>S</u> top bits:	1	*
Elow control:	None	*

Step 6: Click "OK" to enter command line manage interface. Then, click "?"; or input command "help" and then click "Enter" to show all commands of the first level menu, as is shown below:

```
Username Does Not Match, Please Input Again
UserName:
Username Does Not Match, Please Input Again
UserName:
Username Does Not Match, Please Input Again
UserName:admin
Password:*****
#Switch:?
clear
help
              -Clear the screen
              -Help
reboot
              -Reboot This Device
default
              -Restore Factory Settings
logout
             -Logout System
       <dir> -Enter Port Config
port
config <dir>
             -Enter This Device Config
status <dir>
              -Enter This Device Status
#Switch:
```

## **2 COMMAND LINE INSTRUCTION**



#### Instruction:

All commands support tab completion function. For example, if you need to input command of "temperature", as long as you click the initial letter "t", and then click "tab", the system will complete the whole command of "temperature" automatically.

### 2.1 The First Level Menu

#Switch:?	-Clear the screen
heln	-Help
reboot	-Reboot This Device
default	-Restore Factory Settings
logout	-Logout System
port <dir></dir>	-Enter Port Config
config <dir></dir>	-Enter This Device Config
status <dir></dir>	-Enter This Device Status
#SWILCH:	

clear: Clear all characters of current screen.

help: Display all commands line available.

reboot: reboot the model.

default: Restore factory settings. All parameters are reset.

logout: Logout the current account

port: Enter "port" to set up the second level menu, such as port parameters, vlan, etc...

config: Enter the second level menu "config" to modify username, password or debug.

status: Enter the second level menu "status" to check temperature of the model.

### 2.2 The Second Level Menu [port]

#Switch(/port):?		
clear	-Clear the screen	
help	-не]р	
back	-Back To The Previous Level	
vlan	-Set Port Vlan	
frame	-Set Or Get Max frame	
packets	-Set Or Get Max packets	
enable	-Enable Port	
disable	-Disable Port	
mode	-Set Port Mode	
rate	-Set Port Rate	
status	-See Port Status	
#Switch(/port):		

Clear: Clear all characters of current screen.

help: Display all commands line available.

back: Return to the previous menu.

vlan: Configure vlan based on port.

frame: Configure frame size of the port.

packets: Configure data package size of FIFO-TX-RX.

enable: Enable some ports.

disenable: Disenable some ports.

mode: Configure modes of the port.

rate: Configure bandwidth of the port (Need to use cooperatively with command "suppression" under the second level menu "config").

#### 2.2.1 Usage of [vlan]

- 1、 vlan add {1,2,3,15,16} Add a vlan group, and classify 1, 2, 3, 15, 16 to the vlan group
- 2、 *vlan all show* Show all vlan groups of the model
- 3、 *vlan del 1* Delete the first vlan group. When there is only one vlan group, it cannot be deleted. The default classification is that all ports are in one vlan group.

#### 2.2.2 Usage of [frame]

- 1. *frame 1 norma* Set the port 1 frame size as normal mode, namely the max frame size is 1522 bits.
- 2、 *frame 1 jumbo* Set the port 1 frame size as jumbo mode, namely the max frame size is 9728 bits.
- 3、 *frame 1 show* show frame size of port 1.

#### 2.2.3 Usage of [packets]

1. *packets 1 5k* – Set packets 1 size as 5K (packets size parameter: 5K, 10K, 13.5K).

#### 2.2.4 Usage of [enable]

- 1. *enable 1* enable port 1
- 2、 *enable all* enable all ports

#### 2.2.5 Usage of [disenable]

- 1, *disenable1* disable port 1
- 2、 disenable all disable all prots

#### 2.2.6 Usage of [mode]

There are three kinds of modes: [serdes], [sgmii] and [auto]. [serdes] is the default mode. When you insert 10/100/1000M copper SFP to the model, you need to change the mode from [serdes] to [auto] or [sgmii].

- 1、 mode 1 sgmii set the port 1 to [sgmii] mode
- 2. mode all auto set all the ports to auto identification mode

#### 2.2.7 Usage of [rate]

Configure bandwidth of the port (Need to use cooperatively with command "suppression" under the second level menu "config"). Command [suppression] includes two control blocks, bucket0 and bucket1. Each control block controls the turn on/off status of unicast, multicast, and broadcast's flow control. Command [rate] is the second level switch, which determines the exact port and the bandwidth of the port. Default configuration: bucket0 controls broadcast; bucket1 controls unicast and multicast. [rate] controls all ports are turned off by default.

- 1、 rate 1 enable enable flow control of port 1
- 2、 rate 1 disable disable flow control of port 1
- 3、 *rate 1 b0 2* the max bandwidth of the packet controlled by bucket0 of port 1 is 2\*8=16M (the max is 1000M)
- 4、 *rate 1 b1 2* the max bandwidth of the packet controlled by bucket1 of port 1 is 2\*8=16M (the max is 1000M)

#### 2.2.8 Usage of [status]

- 1. *status 1 show* show status of port 1
- 2、 *status all show* show status of all prots

## 2.3 The Second Level Menu [config]

```
#Switch(/config):?
clear -Clear the screen
help -Help
back -Back To The Previous Level
suppression -Set Bucket Bit Rate
user -Modify UserName
password -Modify PassWord
#Switch(/config):
```

clear: Clear all characters of current screen. help: Display all commands line available. back: Return to the previous menu. suppression: Configure bucket0 or bucket1. user: Modify username password: Modify password

#### 2.3.1 Usage of [suppression]

- suppression b0\_type 111111bucket0 turn on flow control of all packets, including unicast, multicast, and broadcast.
- suppression b0\_type 000000bucket0 turn off flow control of all packets, including unicast, multicast, and broadcast.
- 3、 *suppression b1\_type 111111*bucket1– turn on flow control of all packets, including unicast, multicast, and broadcast.
- 4、 *suppression b1\_type 000000*bucket1 turn off flow control of all packets, including unicast, multicast, and broadcast.

```
suppression b0_type 111111(BIT5~BIT0 Set 1:Enable)
BIT0:Unicast
BIT1:Multicast
BIT2:Broadcast And Length<0x16
BIT3:Broadcast And Length>=0x16
BIT4:Reserved MAC Address Frame
BIT5:Destination Lookup Fail
```

#### 2.3.2 Usage of [user]

1、 user switch – modify username to switch

#### 2.3.3 Usage of [password]

1、 *password 12345* – modify password to 123456

## 2.4 The Second Level Menu [status]

#Switch(/status):?		
clear	-Clear the screen	
help	-Нејр	
back	-Back to the Previous Level	
temperature	-Show Temperature of the Device	
#Switch(/status):		

clear: Clear all characters of current screen.

help: Display all commands line available.

back: Return to the previous menu.

temperature: display current temperature of the model.

### 2.4.1 Usage of [temperature]

1. *temperature show* –display current temperature of the model.