

8x8 Fiber Optic Switch Module

User Manual

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1. Summary

The 8x8 MEMS FIBER Optical switches establish optical signal paths passively in milliseconds supporting all date rates, ideally suited to manage and monitor large optical networks intelligently and remotely. It has a unique 8x8 function. The MEMS switches are reliable with longevity suited for continuous operation. The control is net-based GUI that is compatible with standard network management protocols. It is housed in a 1U box.

The user manual provides the following information:

- User interface operation
- Ethernet GUI use

***Note:

- For High power using, please clean the LC/PC connectors every time before using
- When cleaning fiber connectors, please make sure no laser input for safety

2. User interface and operation

2.1 Front Panel



Figure 1. Front Panel

- 1. Power Indicator, turn green when power on.
- 2. Signal input channels, 8 in total.
- 3. Signal output channels, 8 in total.

2.2 Rear Panel





- 1. Ethernet port
- 2. Power supply and switch
- 3. RS232 port (Not Available)

2.3 Operation

To use this module,

- 1. Plug in the 100-240 AC power supply.
- 2. Turn on the power switch.
- 3. Check the green LED on the front panel, if it turns on then the module is powered on.
- 4. Use Twisted pair cable to connect Ethernet port with computer and configure the device and computer in the same IP segment, then type the IP address from the website banner in your computer to go into the WEB GUI. Please follow:

PC settings: IPv4 Address: 192.168.0.80 (can be any from 4-254) IPv4 Subnet Mask: 255.255.255.0 IPv4 Default Gateway: 192.168.0.1 IPv4 DNS Server: 168.95.1.1

WEB address: 192.168.0.3, default user name for WEB: admin, password: admin.

3. GUI

The GUI is used to control the 8x8 MEMS switch, it supports to create a new operation sequence or load and edit an existing operation sequence, keep it looping for certain times and other functions. All the functions are on the menu and the main window.

3.1 Switch Setting

- 1. Click "Switch" to enter the switch position setting page.
- 2. Two switch statuses and running time for each status can be set here. The switch will run in the first status; when the first status' running time is complete, it will switch to the second status. After the second status is done, it will stop or start the next loop.

Tips: The input channels can connect to no output channels, and the different input channels cannot use the same output channel simultaneously

- 3. The input/output power monitor is under the channel setting. It displays the power in realtime. (unit: dBm)
- 4. At the bottom of this page, you can set the number of the loops. Click "Run" to finish the switch setting and start the loop, and click "Stop" to end the loop early.

PHOTONWARES]	Ethern	et	to Remo	ote Switch
Basic	Change Switch Position														
Advance	1000			IN 1	IN 2	IN 3	I	N 4	IN 5		IN 6	IN 7	_	IN 8]
Security	Please enter an	integer between	100~65000 ms	OUT 1 🗸	OUT 2 🗸	OUT 3	∽ 0	UT4 🗸	OUT 5	~	OUT 6 🗸	OUT 7	~	OUT 8 🗸	
Switch	2000 Please enter an	integer between	100~65000 ms	IN 1 OUT 1 V	IN 2	IN 3 OUT 3	I √ 0	N 4 UT 4 →	IN 5	~	IN 6 OUT 6 ✓	IN 7 OUT 7	~	IN 8 OUT 8 V	
					Л										J
	IN1: -0.46	IN2: -0.46	IN3: -0.46	IN4: -0.	.46 IN5:	-0.46 IN	6: -0).46 IN	17: -0.46	11	18: -0.46]			
	OUT1: -0.51 10 Please enter loo	OUT2: -0.51	OUT3: -0.51 Run 5000) Stop	OUT4: -0	. <u>51</u> OUT5:	<u>-0.51</u> OI	<u>JT6: -C</u>).51 O	UT7: -0.51	C	UT8: -0.51				

Figure 3. GUI switch setting

3.2 Modify Web Address

- 1. Click "Basic" to enter the Network setting page.
- 2. Make Sure the DHCP Client is "Disable".
- 3. Enter the new Web address **both** in "Static IP Address" and "Client Destination Host Name/IP".
- 4. Click "Apply" and "Reboot":
- Tips: 1) After reboot the Web address is changed so you need to enter the new address to access the GUI.
 - 2) The "Subnet Mask", "Default Gateway" and "DNS Sever" can be changed, but you should also change the computer's network setting to access the GUI.
 - 3) The "DHCP Client" must be "Disable". When it is "Enable", it will get the IP address automatically.

PHOTONWARES	Ethernet to Remote Switch
D ·	Basic Network Settings
Basic Advance Security Switch	DHCP Client Disable Static IP Address 192.168.0.3 Static Subnet Mask 255.255.25.0 Static Default Gateway 192.168.0.1 Static Dofault Gateway 192.168.0.1 Static DNS Server 168.95.1.1 Connection Type TCP Transmit Timer 100 Please enter an integer between 10~65335 ms Server/Client Mode Server Server Listening Port 5000 Please enter an integer between 1024~65535 Client Destination Host Name/IP 192.168.0.3 Please enter nor IP address Client Destination Port 5000
	Please enter an integer between 1024~65535 Apply Cancel Restore default Reboot Basic Network Settings Dynamic DNS Settings DDNS Client Disable < DDNS Server Address dyndns.org < Host/Domain Name AGSW0000-0001 Username Password Apply Cancel

Figure 4. GUI Network setting

3.3 Modify Username and Password

- 1. Click "Security" to enter the Username and Password setting page.
- 2. Type new username and click "Apply" to change the username.
- 3. Enter old password and new password and click "Apply" to change the password.

PHOTONWARES		Ethernet to Remote Switch
Desis	Change Username S	etting
Advance Security	New Username	Apply Cancel
Switch	Change Password S Old Password New Password Confirm Password	Apply Cancel
	Accessible IP Settin IP #1 IP #2 IP #3 IP #4 Control	0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 Disable ✓ When you change the accessible IP successful, you must reboot device to take it effect. please confirm settings before reboot device. Apply Cancel

Figure 5. GUI Username and Password setting