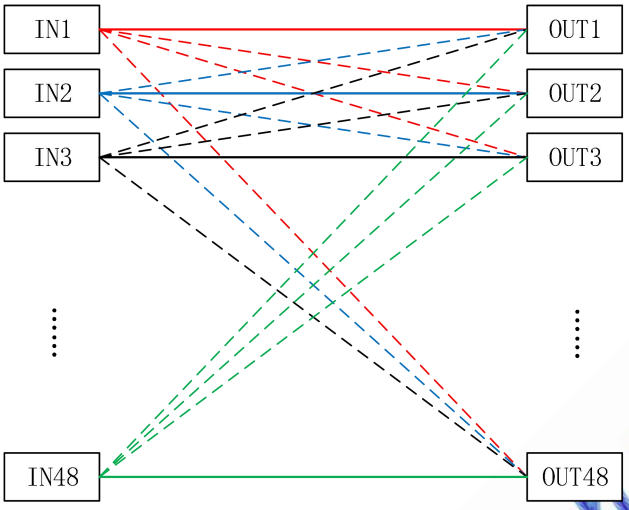
Rack mount 48X48 optical switchgear specification

directory

1. Schematic diagram of the optical path

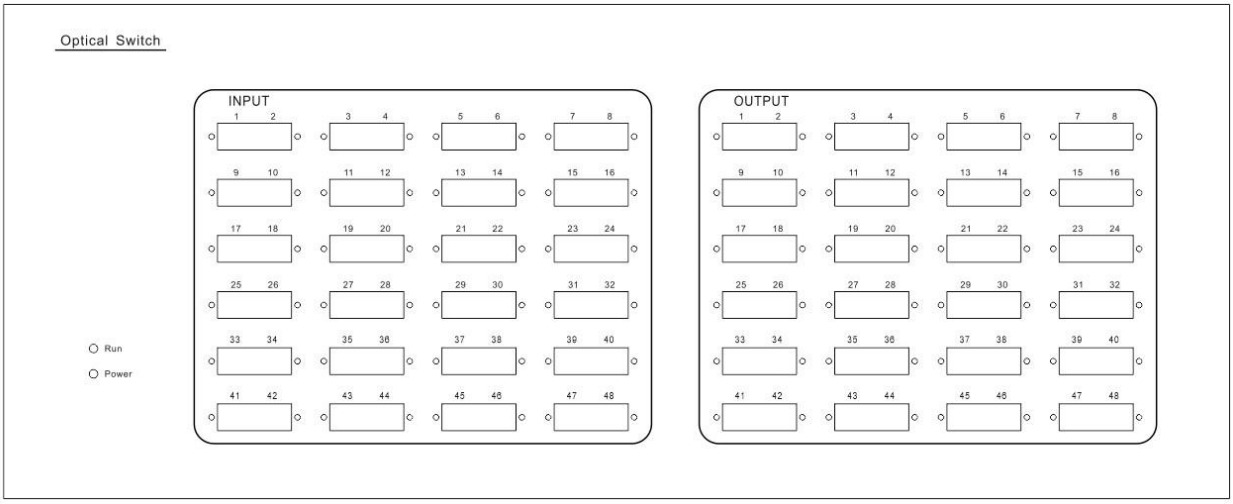


2. Performance indicators

Model number	FSW1-48X481D-1U612
Operating wavelength	1260~1650nm
Test wavelength	1310/1550nm
Insertion loss	≤4.0dB
Reproducibility	≤±0.1dB
Return loss	≥50dB
Crosstalk	≥55dB
Switch time	≤50ms
Fiber type	SM（9/125um）
Transmit optical power	≤500mW
Service life	$\geqslant 10^9$
Connector form	SC/APC
Monitor ports	RJ45、RS-232
Working power supply	AC: 85 ～ 264 V（50/60Hz）or DC: 36 ～ 72 V
Operating temperature	-5 ～ + 60℃
Storage temperature	-40 ～ + 85℃
Chassis type	19-inch standard 4U rack (483×500×176mm) has a yellowish gauze pattern

3. Schematic description of the structure

Front Panel Description:

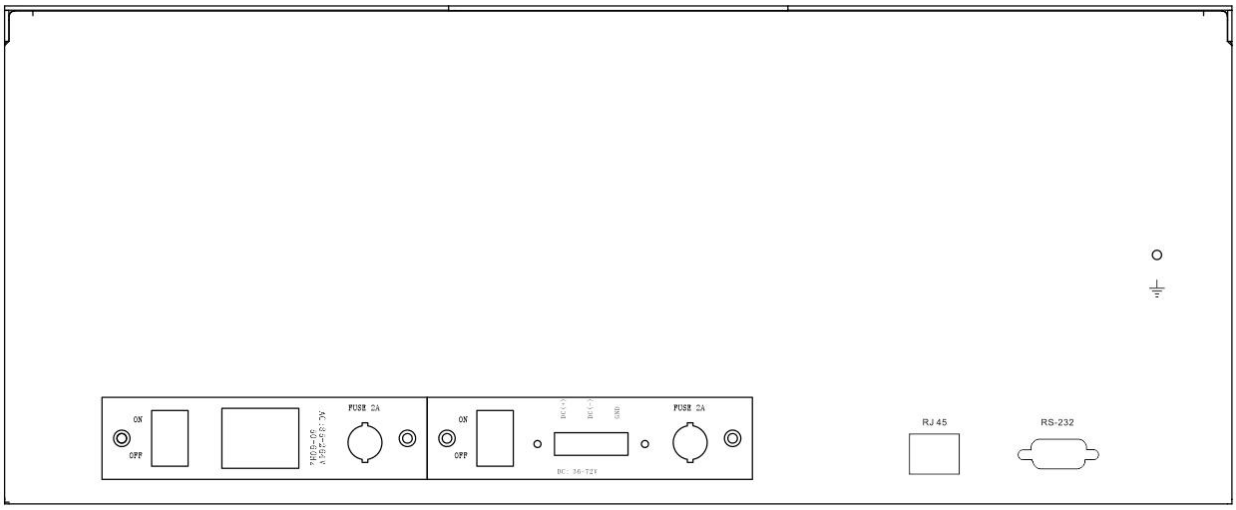


(1) Indicator light Run description: green, flashing once in 1 second under normal working conditions of the device.

(2) Indicator light Power description: green, the equipment power supply is always on under normal conditions.

(3) Optical interface description: 96 optical fiber ports on the equipment panel are SC/APC, including 48 INPUT ports. OUTPUT PORT 48.

Back panel description:



(1) RJ45 Ethernet interface, RS-232 serial port: communication interface for equipment monitoring data information.

(2) AC and DC power interface: equipment AC power input interface.

(3) Terminal post: external grounding wire post.

4. Description of programmatic instructions

This equipment can receive control signals from the computer through RJ45 interface or RS232 interface to achieve real-time monitoring.

(1) This device can only execute one instruction at a time. Usually, the program returns the corresponding value before entering the next instruction.

(2) Please use capital letters.

(3) In actual operation, enter the sharp bracket "<" as the start character and the sharp bracket ">" as the end character.

(4) Instruction error returns <ER>.

Program-controlled instruction set

command	description	example
<SET_IP_xxx_xxx_xxx_xxx>	Setting/querying the IP address of the local machine (reboot takes effect) 1.xxx 000~255 indicates that the IP address is set 2. Successful return: <SET_IP_OK> 3.<IP_?> indicates that the IP address is queried	Send: <SET_IP_192_168_002_011> Set the IP address to 192.168.2.11 Send: <IP_?> Return: <IP_192_168_002_011> The current IP address is: 192.168.2.11
<SET_GW_xxx_xxx_xxx_xxx>	Set/query gateway (reboot takes effect) 1.xxx 000~255 indicates that the gateway is set 2. Successful return: <SET_ GW_OK> 3.<GW_?> indicates that the gateway address is queried	Send: <SET_GW_192_168_002_001> Set the gateway to 192.168.2.1 Send: <GW_?> Return: <GW_192_168_002_001> Indicates that the current gateway is: 192.168.2.1
<SET_SM_xxx_xxx_xxx_xxx>	Set/query subnet mask (reboot takes effect) 1.xxx 000~255 indicates that the subnet mask is set 2. Successful return: <SET_SM_OK> 3.<SM_?> indicates the query subnet mask	Send: <SET_SM_255_255_255_000> Indicates that the subnet mask is set to 255.255.255.0 Send: <SM_?> Return: <SM_255_255_255_000> Indicates that the current subnet mask is: 255.255.255.0
<SET_TCPP_xxxxx>	Set/query TCP communication port number (reboot takes effect) 1.xxxxx is 00000~65534, indicating that the TCP communication port number is set 2. Successful return: <SET_TCPP_OK> 3.<TCPP_?> indicates querying the TCP communication port number	Send: <SET_TCPP_04001> Set the TCP communication port number: 4001
<BAUD_x>	Set or query the baud rate of the serial port 1.x is 1~9, which indicates the baud rate	Send: <BAUD_5> Successful return: <BAUD_5_OK> Set the device serial port baud rate

	of 2400, 4800, 9600, 14400, 19200, 38400, 56000, respectively 57600、115200 Successful return: <BAUD_x_OK> 2. Send <BAUD_?> query baud rate	to 19200 After the configuration is saved, the restart takes effect!
<RESET>	Restart the device	The serial port successfully returns the device boot information
<RESTORE>	Factory reset	The serial port successfully returns the device boot information
<INFO_?>	Query device information	Successful return: <OSW-48X48_VER1.00_SN0123456789_C10.02.00024> Indicates OSW-8X8 device, version 1.00, SN number 01234567890, product number C10.02.00024;
<OSW_A_?>	Query channel status Return: <OSW_Output channel corresponding to In1_Output channel corresponding to In2_ Output channel corresponding to In3_ Output channel corresponding to In4_ Output channel corresponding to In5_Output channel corresponding to In6_ … _Output channel corresponding to In48>	Return: <OSW_48_47_46_45_44_43_42_41_40_39_38_37_36_35_34_33_32_31_30_29_28_27_26_25_24_23_22_21_20_19_18_17_16_15_14_13_12_11_10_09_08_07_06_05_04_03_02_01> The current optical path is: In1→Out48、In2→Out47、In3→Out46、In4→Out45、In5→Out44、In6→Out43、In7→Out42、In8→Out41、In9→Out40、In10→Out39、In11→Out38、In12→Out37、In13→Out36、In14→Out35、In15→Out34、In16→Out33、In17→Out32、In18→Out31、In19→Out30、In20→Out29、In21→Out28、In22→Out27、In23→Out26、In24→Out25、In25→Out24、In26→Out23、In27→Out22、In28→Out21、In29→Out20、In30→Out19、In31→Out18、In32→Out17、In33→Out16、In34→Out15、In35→Out14、In36→Out13、In37→Out12、In38→Out11、In39→Out10、In40→Out9、In41→Out8、In42→Out7、In43→Out6、In44→Out5、In45→Out4、In46→Out3、In47→Out2、In48→Out1;
<OSW_SW_a1_a2_a3_a4_a5_a6_a7_a8_a9_a10_a11_a12_a13_a14_a15_a16_a17_a18_a19_a20_a21_a22_a23_a24_	Channel switching successfully Return: <OSW_ Output channel corresponding to In1_ Output channel corresponding to In2_ Output channel corresponding to In3_ Output channel	Send: <OSW_SW_48_47_46_45_44_43_42_41_40_39_38_37_36_35_34_33_32_31_30_29_28_27_26_25_24_23_22_21_20_19_18_17_16_15_14_13_12_11_10_09_08_0

a25_a26_a27_a28_a29_a30_a31_a32_a33_a34_a35_a36_a37_a38_a39_a40_a41_a42_a43_a44_a45_a46_a47_a48>(a1~a48 take values from 01 to 48, and the values cannot be the same. If the value is 00, no output status is displayed)	corresponding to In4_ Output channel corresponding to In5_ Output channel corresponding to In6_ …_ Output channel corresponding to In48_OK>	7_06_05_04_03_02_01> Return: <OSW_SW_48_47_46_45_44_43_42_41_40_39_38_37_36_35_34_33_32_31_30_29_28_27_26_25_24_23_22_21_20_19_18_17_16_15_14_13_12_11_10_09_08_07_06_05_04_03_02_01_OK> Indicates that the optical path is set to: In1→Out48、In2→Out47、In3→Out46、In4→Out45、In5→Out44、In6→Out43、In7→Out42、In8→Out41、In9→Out40、In10→Out39、In11→Out38、In12→Out37、In13→Out36、In14→Out35、In15→Out34、In16→Out33、In17→Out32、In18→Out31、In19→Out30、In20→Out29、In21→Out28、In22→Out27、In23→Out26、In24→Out25、In25→Out24、In26→Out23、In27→Out22、In28→Out21、In29→Out20、In30→Out19、In31→Out18、In32→Out17、In33→Out16、In34→Out15、In35→Out14、In36→Out13、In37→Out12、In38→Out11、In39→Out10、In40→Out9、In41→Out8、In42→Out7、In43→Out6、In44→Out5、In45→Out4、In46→Out3、In47→Out2、In48→Out1;

5. Factory default configuration

project	Factory default configuration	remark
Device IP	192.168.1.178	How it works: TCP Server
Device gateway	192.168.1.1	
Subnet mask	255.255.255.0	
TCP port number	4001	
Serial port baud rate	115200	8 data bits, 1 stop bit, no parity.
Optical path channel	In1→Out1、In2→Out2、In3→Out3 In4→Out4、In5→Out5、In6→Out6 In7→Out7、In8→Out8、In9→Out9 In10→Out10、In11→Out11、In12→Out12	

	In13→Out13、In14→Out14、In15→Out15 In16→Out16、In17→Out17、In18→Out18 In19→Out19、In20→Out20、In21→Out21 In22→Out22、In23→Out23、In24→Out24 In25→Out25、In26→Out26、In27→Out27 In28→Out28、In29→Out29、In30→Out30 In31→Out31、In32→Out32、In33→Out33 In34→Out34、In35→Out35、In36→Out36 In37→Out37、In38→Out38、In39→Out39 In40→Out40、In41→Out41、In42→Out42 In43→Out43、In44→Out44、In45→Out45 In46→Out46、In47→Out47、In48→Out48	