

# **SOFTTEL**

## **1550nm 10G Multi-Port WDM**

### **EYDFA**

#### **SPA-10G-16/32**

##### **I. Features**

- (1) Single/dual input for choice, built in optical switch for dual input, the switching power can be set by the button in the front panel or by web snmp.
- (2) Output adjustable by buttons in the front panel or web snmp, the range is down 4dBm
- (3) Max multi 32 port, with built in 1310/1490/1550/1270/1577/WDM, max total output 38 dBm
- (4) Standard RJ 45 port for remote control, we can provide output contract and web manager for choice, and also plug-in snmp hardware can be reserved for update.
- (5) With laser key to turn on/off the laser.
- (6) With RF test function.
- (7) Adopts JDSU Pump laser
- (8) Led displays the working condition of the machine
- (9) Dual power hot plug power supply for choice, 90V~250V AC or -48V DC

##### **II. Installation**

###### **Before installation**

1. Please check if there is damage in outside of the machine
2. Please check the spare parts is complete or not, if not complete, please contact the seller.

## Installation

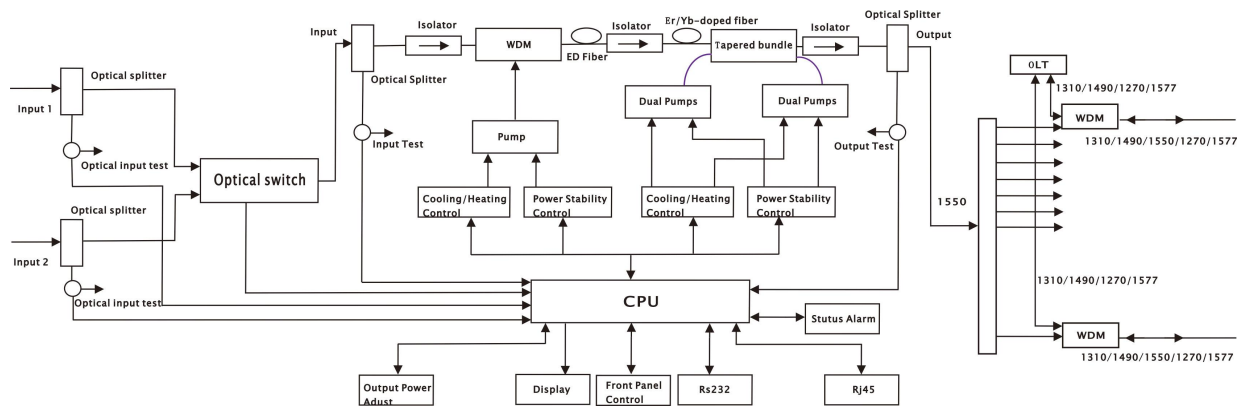
1. Please keep at least 1.75inches (4.5cm) space for cooling if the machine installed with other machines.
2. Please check the power supply socket and the grounding of the power supply, the grounding impedance should  $\leq 4\Omega$ , 220V power supply should be with three cables and the grounding cable should be in the middle, Unfitted grounding will damage the device or influence the signal quality.
3. Please make sure the power supply switch to off in the rear panel
4. Please confirm the fiber port is clean before connection the fiber.

## III. Set and Operation

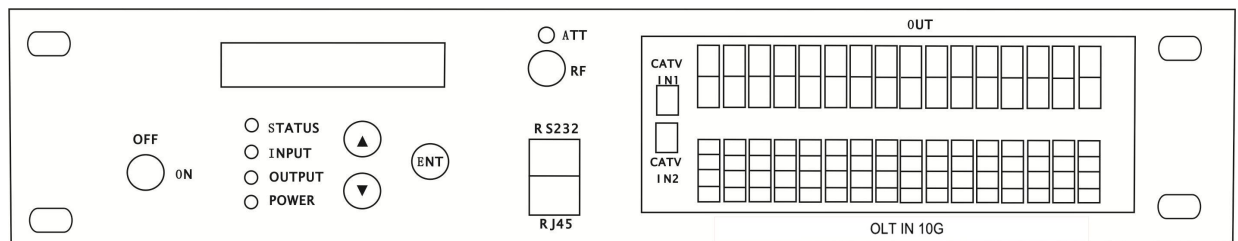
### Main Parameters

Items	Parameter									
	31	32	33	34	35	36	37	38	39	40
Output(dBm)										
Output(mW)	1250	1600	2000	2500	3200	4000	5000	6400	8000	10000
Input(dBm)	-8~+10									
Wavelength (nm)	1543~1557									
Output stability(dB)	< $\pm 0.3$									
Optical Return Loss(dB)	$\geq 45$									
Fiber Connector	FC/APC, SC/APC, SC/PC, LC/APC, LC/PC									
Noise Figure (dB)	<6.0(input 0dBm)									
Web port	RJ45(SNMP)									
Power Consumption(W)	$\leq 80$									
Voltage (V)	220VAC(90~265), -48VDC									
Working Temp( $^{\circ}\text{C}$ )	-0~55									
Size (mm)	390(L) $\times$ 486(W) $\times$ 88(H)									
NW(Kg)	8									

## Diagram



## Front Panel



### 3.3.1 LED display

Displays the working parameter of the machine

### 3.3.2 STATUS Indication light

Green: Normal Condition

Red: No input or abnormal condition

### 3.3.3 INPUT Indication Light

Green: Normal

### 3.3.4 OUTPUT Indication Light

Green: Normal

### 3.3.5 Power Indication Light

Green: Power Connected

### 3.3.6 Key

ON: Turn on the laser

OFF: Turn off the laser

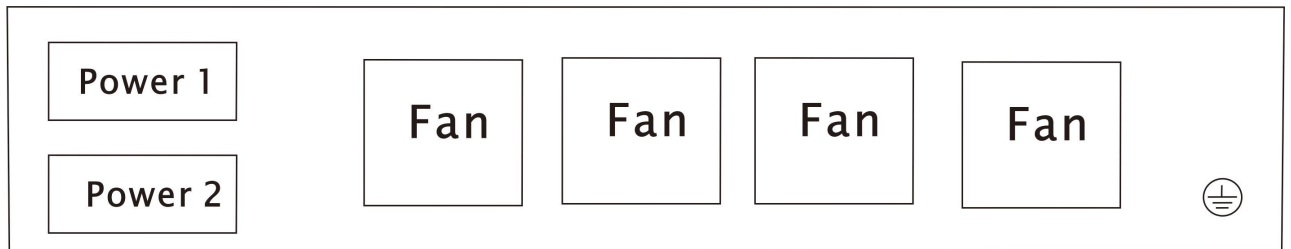
### 3.3.7 RS232

Network management for local computers

### 3.3.8 RJ45

SNMP, for remote computer network management

#### Rear Panel



#### 3.4.1 Power Switch(220V)

ON: Turn on the power

OFF: Turn off the power

#### 3.4.2 Power Socket

AC220V or DC-48V

## V. Notes

1. The main component of the amplifier laser is sensitive to the static electricity, so please keep the amplifier away from the static electricity. Furthermore, please keep it away from caustic things. Please keep the amplifier in temperature between  $-25^{\circ}\text{C}$  and  $65^{\circ}\text{C}$ .
2. Please make sure the power is earthed.
3. Please don't now attempt to look into the optical connectors when power applied, eye damage may result.
4. Please don't block up the heating dispersion hole and keep the machine aired.
5. Please don't unfold the machine or remove any parts of the machine.
6. **Please don't insert the patch cord when the power is on**
7. **Please don't test the EDFA repeatedly.**

## VI. Solution to some ordinary problem

1. Power supply light STATUS: green  
LED light LASER: red

VFD display: NO LASER INPUT

Reason: NO 1550nm optical input

Solution: Input 1550nm optical signal

2. In LED n it displays the right optical power, but not enough by test meter

Reason: 1. the optical meter is not very correct

2. the input optical power is out of the requested value( -3~10dB)

3. too big loss in the test pigtail

4. There is dust in the connectors

Solution:

Use absolute alcohol to wash the all the connects and the test point of optical meter

**Note:**

**Don't test EDFA with pigtail again and again, it will hurt the fiber connector and make the factual power become smaller.**