

**1550nm EYDFA**  
**With 1310/1490/1550WDM**  
**Specification**

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## I .Product Overview

1550nm series multi-outputs optical amplifier gain spectrum bandwidth between 1545 ~ 1563nm, adopt high reliability multimode pump laser and double clad fiber, the unique APC,ACC and ATC circuit, the max output power can reach to 40dBm, one device and replace the original several to dozens traditional EDFA, can greatly save the cost and maintenance expense, improve the stability of the network operation, high output power 1550nm optical amplifier is playing an increasingly important role in the continuous extension of the optical fiber network, providing a flexible and low-cost solution for the wide coverage of CATV system in large and medium-sized cities.

## II.Feature

**2.1 Optical switch optional :** 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 , can set the threshold and select manually or automatically .

**2.2 Output adjustable :** Output adjustable by buttons in the front panel or web SNMP, the range is down 4dBm. Maintenance function of one-time downward attenuation of 6dBm by buttons in the front panel or web SNMP, to facilitate the optical fiber hot-plug operation without turn off the device

**2.3 Output port number optional :** according to the customer's requirements

can choose 8 ports,16 ports,32 ports,64 ports and 128 port; also can select 1310/1490/1550WDM, the max total output power can reach to 40dBm.

**2.4 SNMP** : Standard RJ45 port for remote control, provide web management function.

**2.5 Laser key** : With laser key, can turn ON/OFF the laser.

**2.6 RF Test** : With RF test function. ( According to customer's requirement )

**2.7 High quality laser** : Laser adopt brand-new imported laser Lumentum(JDSU) and II-VI from USA, Fitel from Japan, to guarantee stable operation.

**2.8 Perfect warning mechanism** : microprocessor to monitor the working status of the laser, and the LCD display the device's function and fault warning on the front panel etc.

**2.9 Dual power supply guarantee** : high quality power supply(hot-plug optional) , can work under 90V ~ 265VAC or-48VDC.

### III.Order Information

No.	Model	Total output (dBm)	Total output (mW)	Number of output	Each output(dBm)
3.1.1	EYDFA-16x17	31	1250	16	17
3.1.2	EYDFA-16x18	32	1600	16	18
3.1.3	EYDFA-16x19	33	2000	16	19
3.1.4	EYDFA-16x20	34	2500	16	20

	EYDFA-32x17	34	2500	32	17
3.1.5	EYDFA-16x21	35	3200	16	21
	EYDFA-32x18			32	18
3.1.6	EYDFA-16x22	36	4000	16	22
	EYDFA-32x19			32	19
3.1.7	EYDFA-16x23	37	5000	16	23
	EYDFA-32x20			32	20
3.1.8	EYDFA-16x24	38	6400	16	24
	EYDFA-32x21			32	21
3.1.9	EYDFA-32x22	39	8000	32	22
	EYDFA-64x19			64	19
3.1.10	EYDFA-32x23	40	10000	32	23
	EYDFA-64x20			64	20

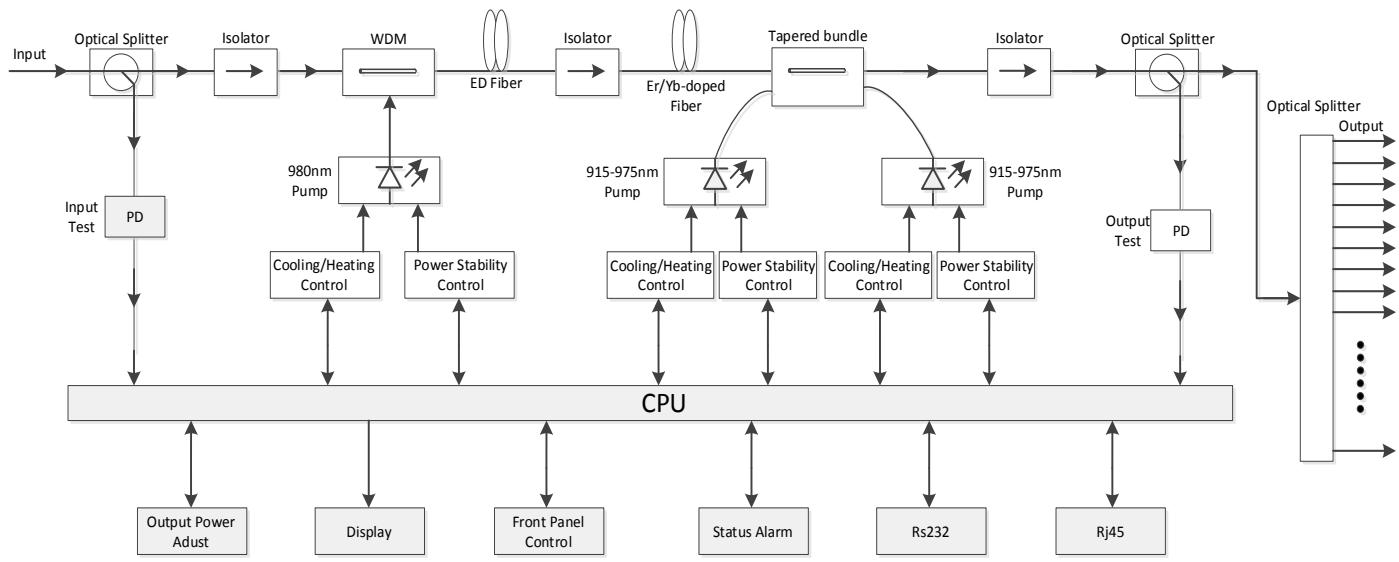
## IV.Parameter

No.	Item	Technical parameter			Unit	Remarks
		Min	Typical	Max		
4.1.1	Wavelength	1545		1565	nm	
4.1.2	Input power range	-8		10	dBm	
4.1.3	Output power range	26		40	dBm	
4.1.4	Output stability			±0.3	dBm	
4.1.5	Output adjust range		↓4.0		dBm	

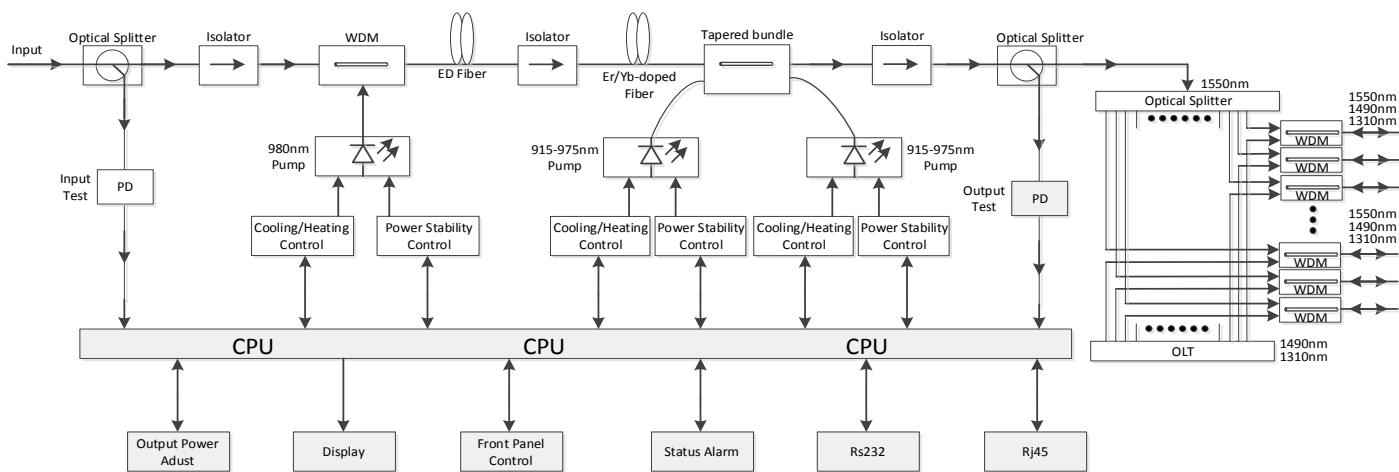
4.1.6	Noise figure			$\leq 6$	dB	Input 0dBm , $\lambda=1550\text{nm}$	
4.1.7	Return loss	Input port	45		dB		
		Output port	45		dB		
4.1.8	Connector type		FC/APC、SC/APC				
4.1.9	C/N		51		dB	Test by GT/T 184-2002	
4.1.10	C/CTB		65		dB		
4.1.11	C/CSO		65		dB		
4.1.12	Power supply		AC110V - 250V( 50 Hz ) ; DC48V		V		
4.1.13	Consumption		50	80	100	W	Depend on the output power
4.1.14	Working temp range		-5		55	°C	
4.1.15	Max working relative humidity				95% No condensation	%	
4.1.16	Storage temp range		-30		70	°C	
4.1.17	Max storage relative humidity				95% No condensation	%	
4.1.18	Dimension			370(L)×486(W)×88(H)		mm	
4.1.19	Net weight ( Kg )			8		Kg	
Dual input with optical switch model							
4.1.20	Insertion loss			1	dB		
4.1.21	Channel interference		55		dB		
4.1.22	Switch time			$\leq 20$	mS		

## V.Diagram

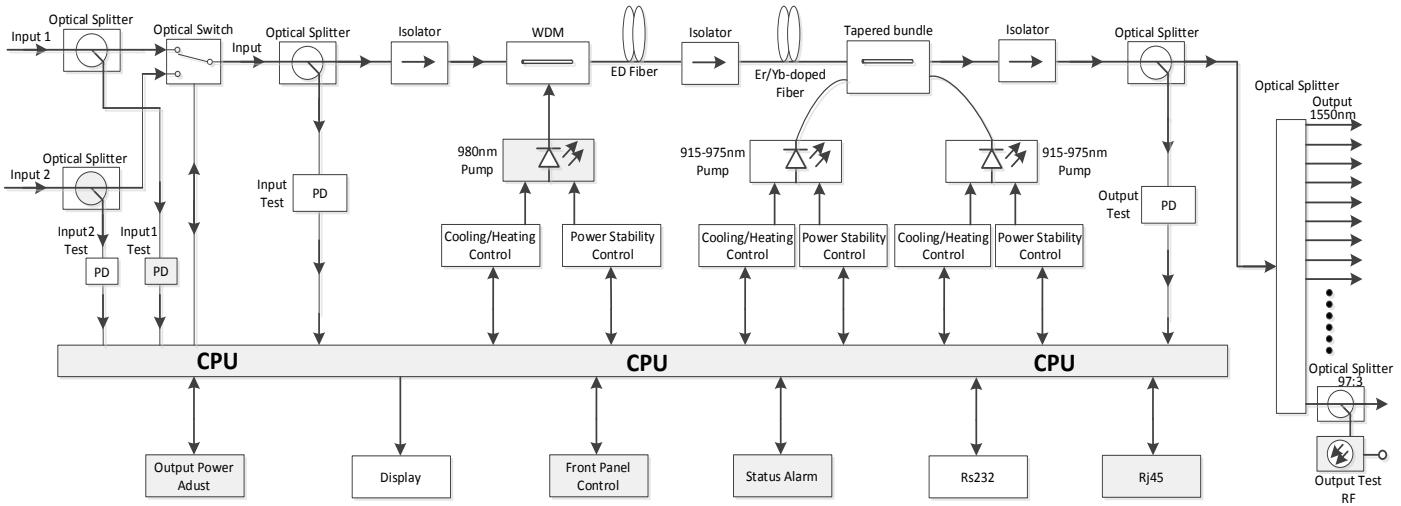
### 5.1 Single input, standard Model :



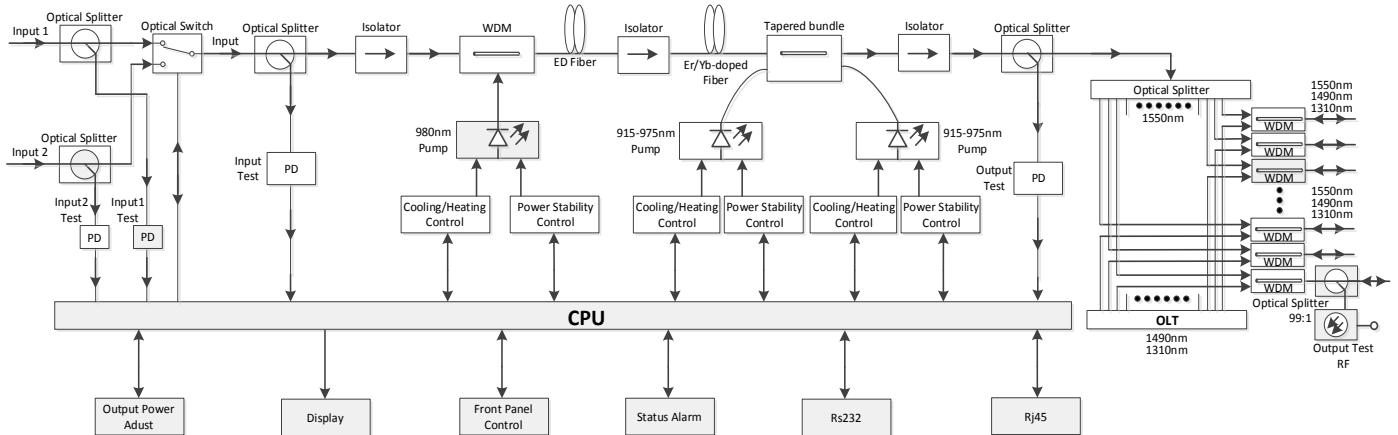
### 5.2 Single input, with WDM :



### 5.3 Dual inputs, standard Model ( With RF test port ):

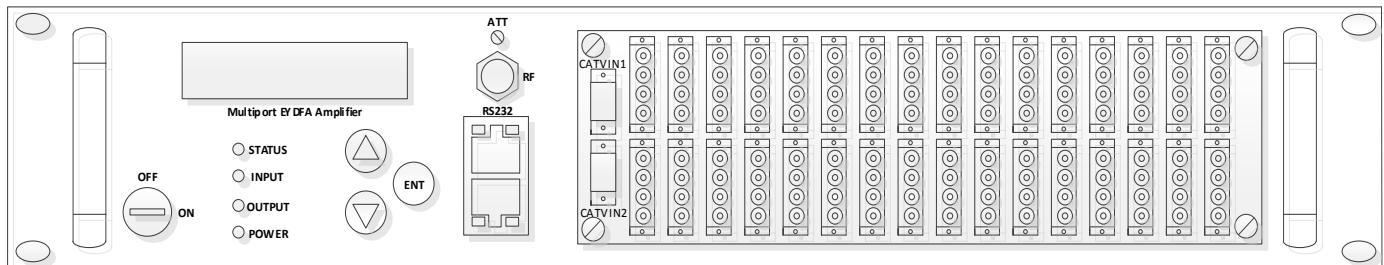


### 5.4 Dual inputs, with WDM ( With RF test port ):



## VI.Panel Structure

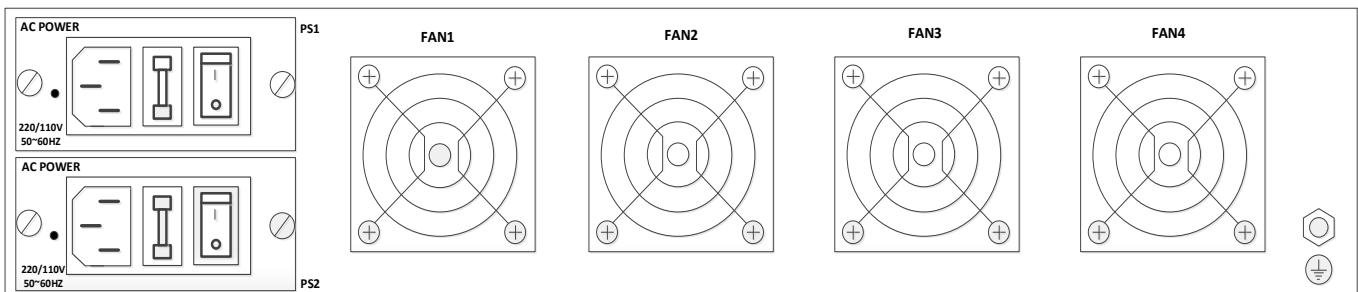
### 6.1 Front panel structure



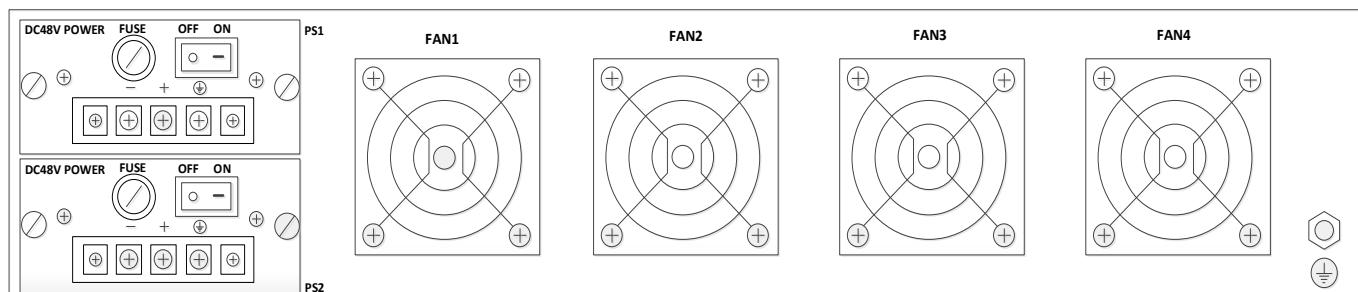
8 ports, 16 ports, 32 ports, 64 ports front panel or with WDM

### 6.2 Rear panel structure

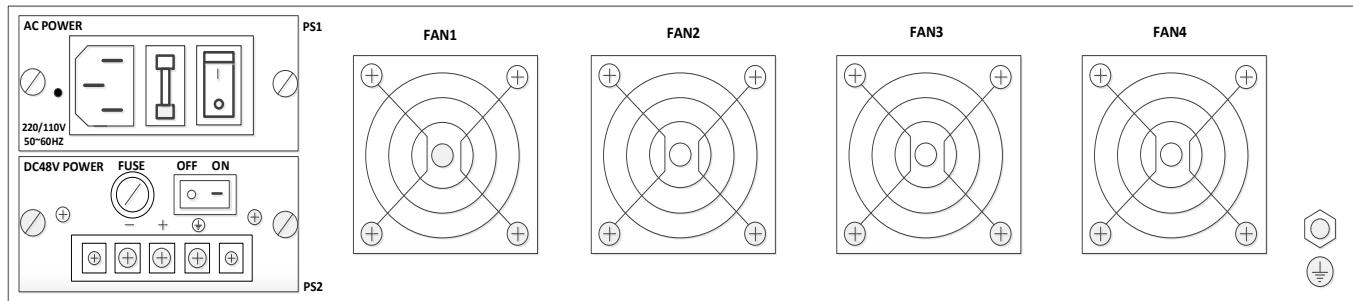
#### Style 1: ( dual power supply:220V/110V )



#### Style 2 : ( dual power supply:-48V )



### **Style 3 : ( dual power supply: 220V/110V and -48V )**



## **VII.Application :**

1. FTTH、FTTx PON etc. ;
2. Make full use of existing optical fiber resources to achieve network upgrade and capacity expansion.
3. IPQAM narrow insert data service.