

# **Multiport EYDFA Amplifier**

**User's Manual**

**VTA-EY Series**

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## I . Features

- (1) Output adjustable by buttons in the front panel or web manage, the range is 0~5dBm.
- (2) Maintenance function of one-time downward attenuation of 6dBm by buttons in the front panel, to facilitate the optical fiber hot-plug operation without turn off The device.
- (3) Multi-ports output, can built in 1310/1490/1550WDM.
- (4) RJ45 port enables remote monitoring and management of devices on WEB pages and USB port facilitates device upgrade
- (5) The laser turn on/off by locks keys in the front panel.
- (6) Adopts JDSU or Oclaro Pump laser.
- (7) Led displays the working condition of the machine.
- (8) Dual power hot-plug power supply for choice, 110V,220V AC.

## 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 us.

### **Installation**

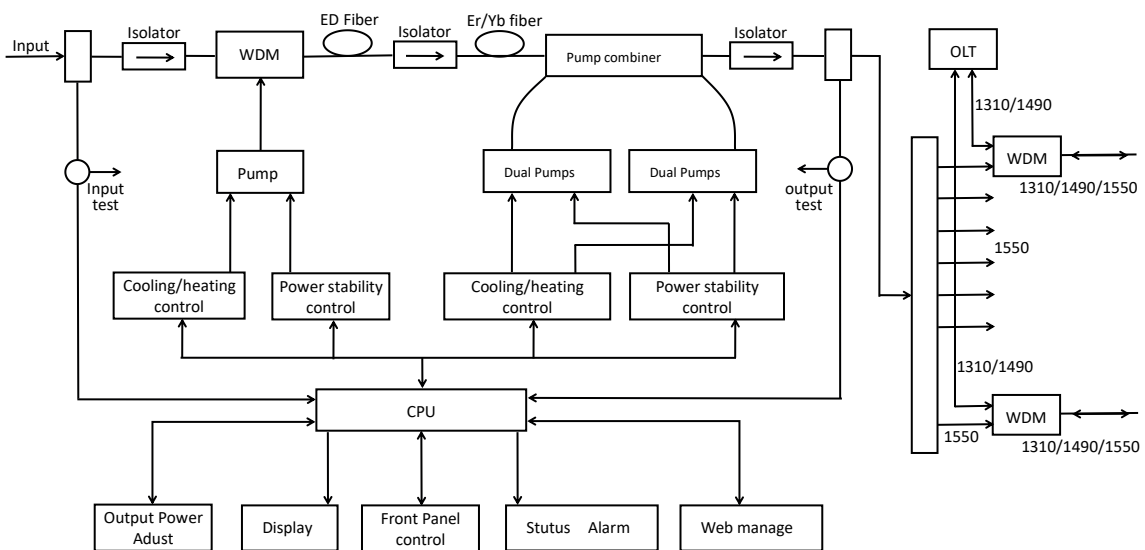
1. When multiple devices are installed, at least about 1.75 inches(about4.5cm) of space should be reserved between the devices,to facilitate ventilation and heat dissipation Of equipment.
2. Please check the power supply socket and the grounding of the power supply, the grounding Impedance should  $\leq 4\Omega$ , 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

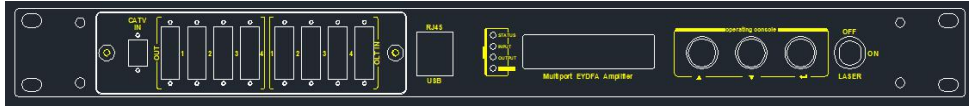
#### MAIN Parameters

Items	Parameter									
Output (dBm)	25	26	27	28	29	30	31	32	33	34
Output (mW)	320	400	510	640	800	1000	1250	1600	2000	2500
Input (dBm)	-5 ~ +10									
Range or output adjustment (dBm)	5									
Wavelength (nm)	1540 ~ 1565									
Output stability (dB)	<±0.3									
Optical return loss (dB)	≥ 45									
Fiber connector	FC/APC, SC/APC, SC/IUPC, LC/APC, LC/UPC									
Noise figure (dB)	<6.0 (input 0dBm)									
Connector type	RJ45, USB									
Power consumption (W)	≤50									
Voltage (V)	110VAC, 220VAC									
Working temp (°C)	0 ~ 55									
Size (mm)	425(L)x482(W)x44(H)									
NW (Kg)	4.3									

#### Diagram



## Front Panel



4Ports , 8Ports or with WDM

### 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: RJ45

For remote monitoring and management .

### 3.3.8: USB

Upgrade equipment or serial communication.

## Rear Panel



### 3.4.1: Power Switch

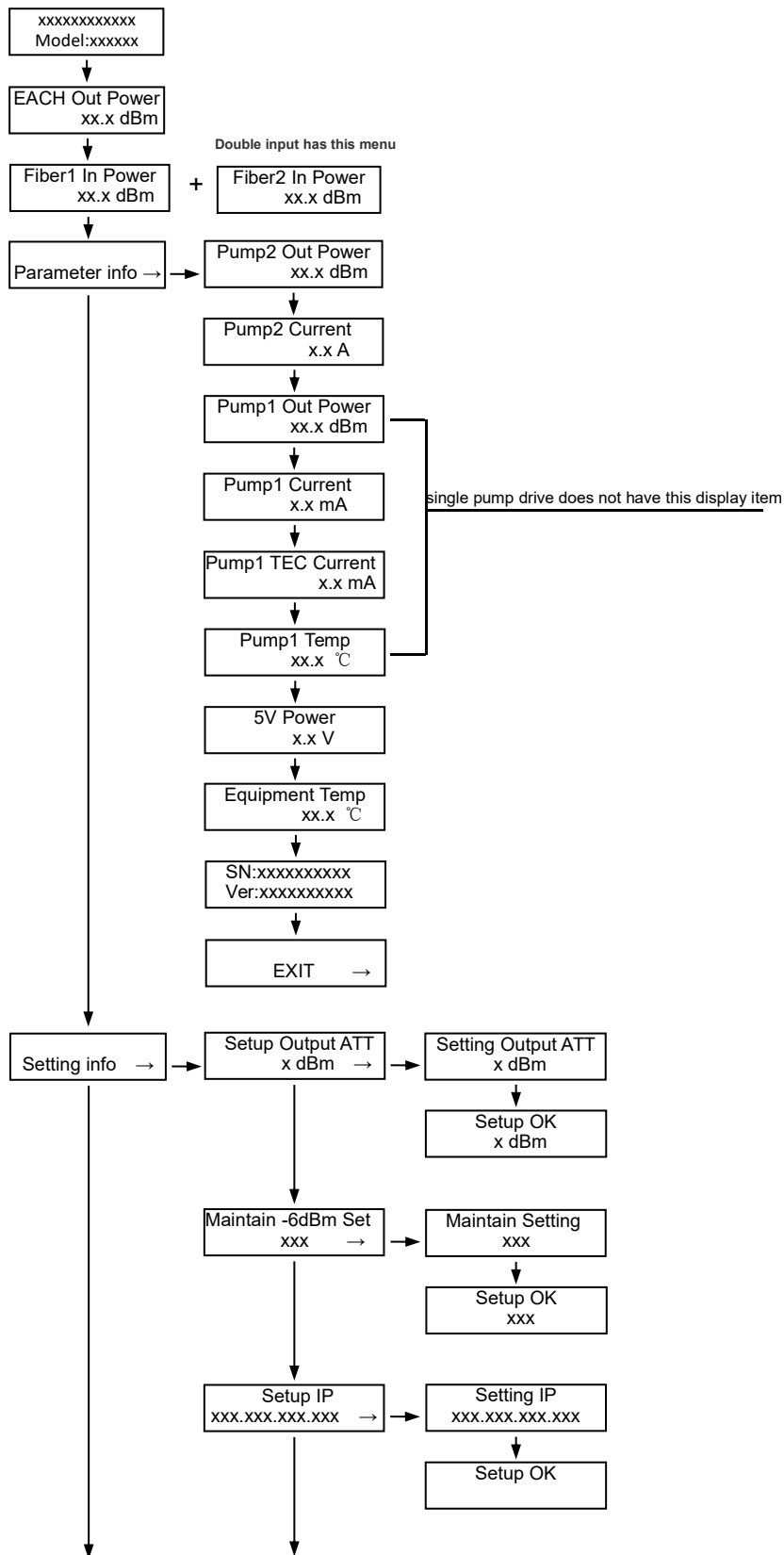
ON:Turn on the power

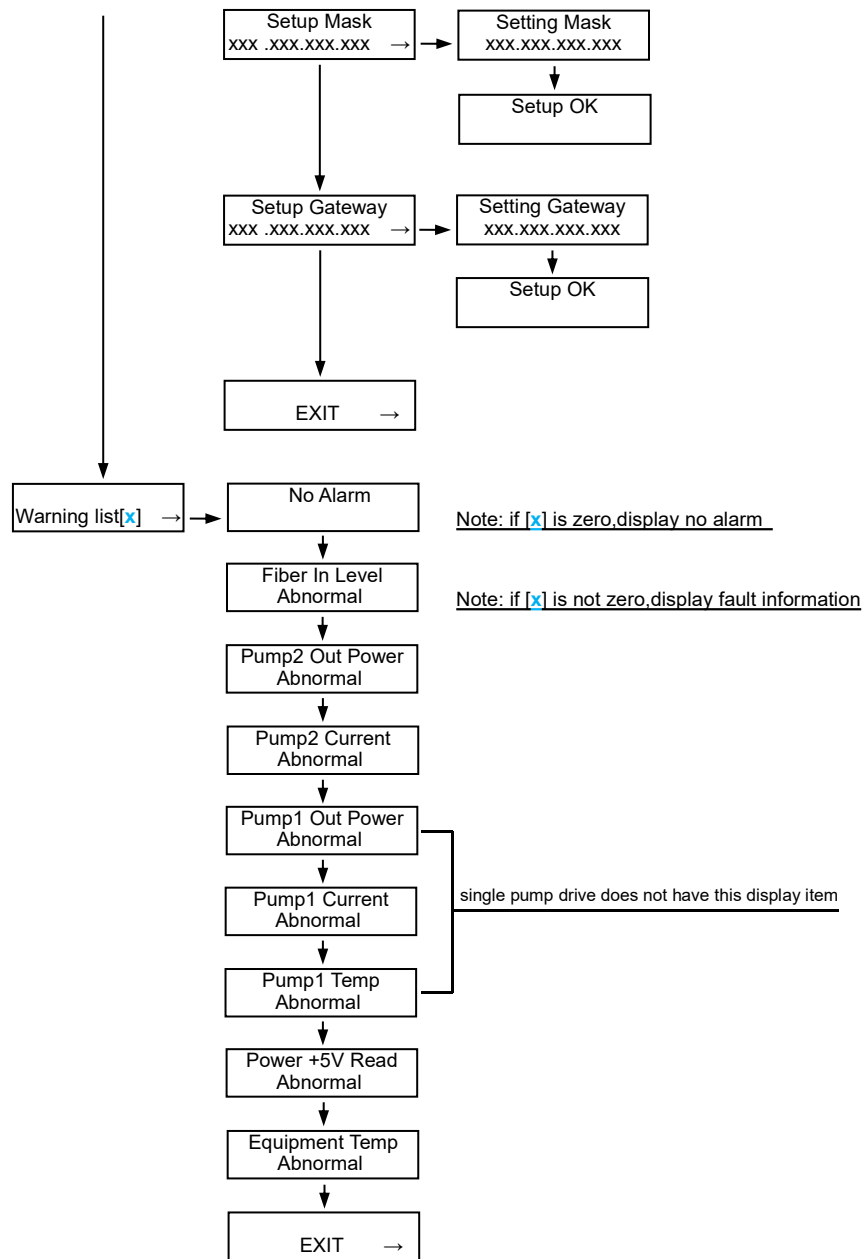
OFF:Turn off the power

### 3.4.2: Power Socket

110VAC or 220VAC

# Menu operation flow chart

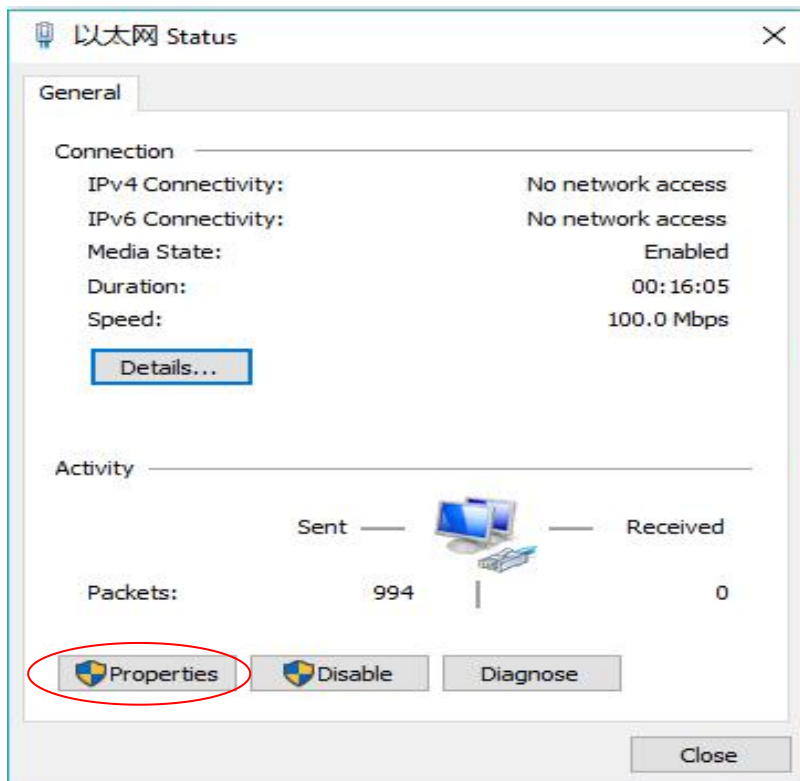
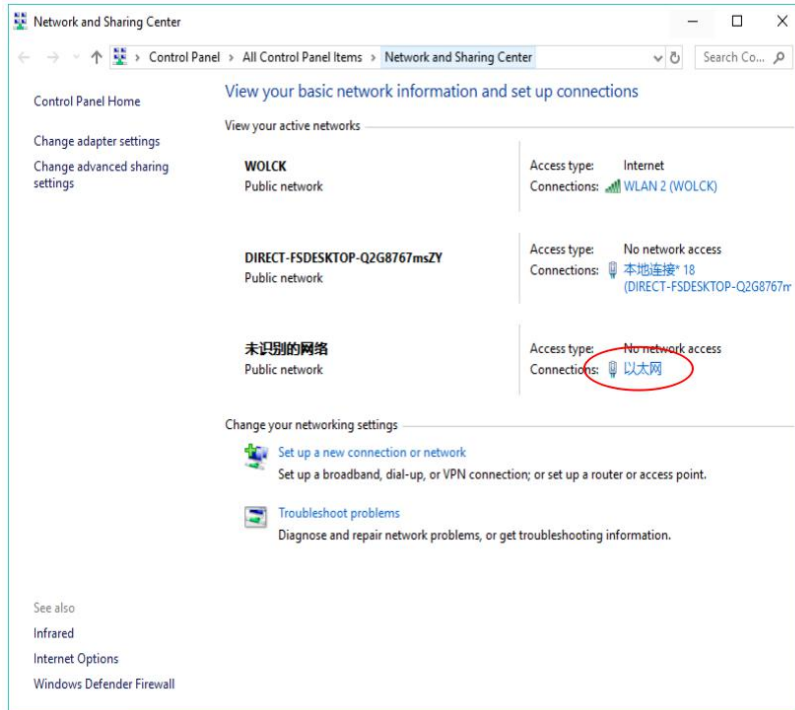




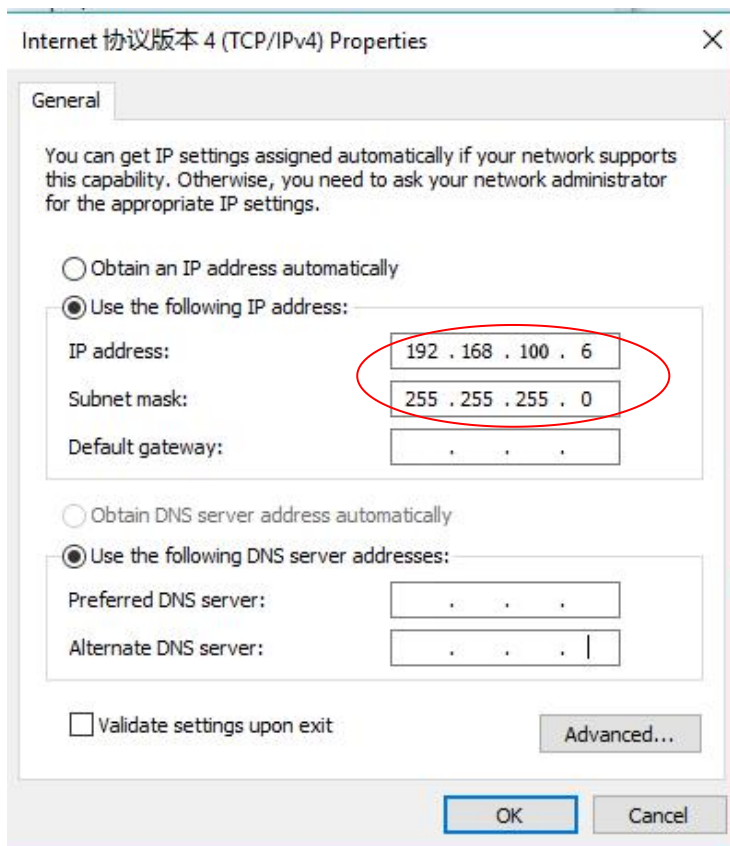
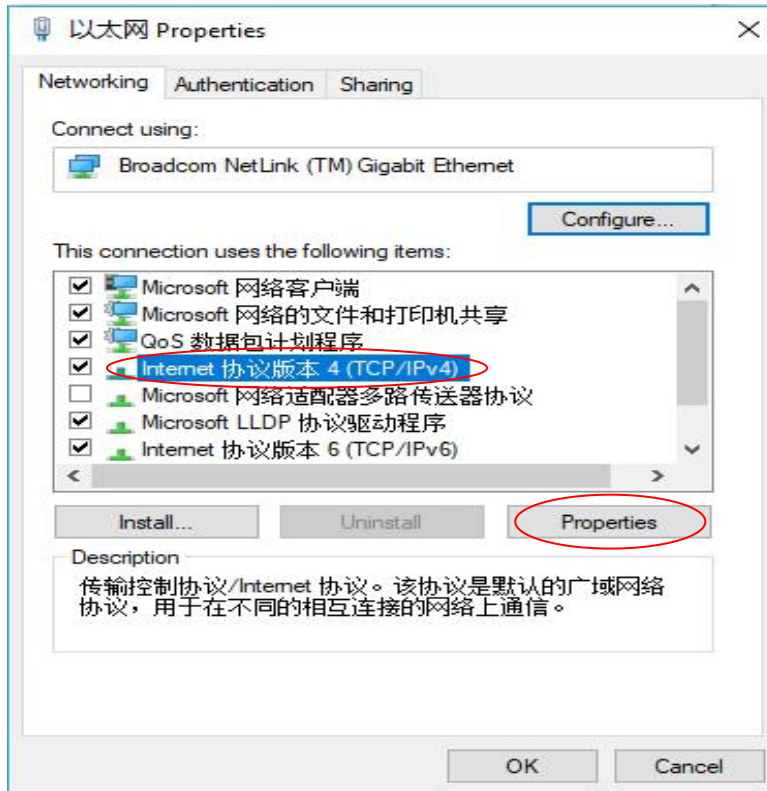
## IV. Web manage

The user can monitor and set the basic parameters of the device directly through the Web browser, The following example are based On Chrome browser.

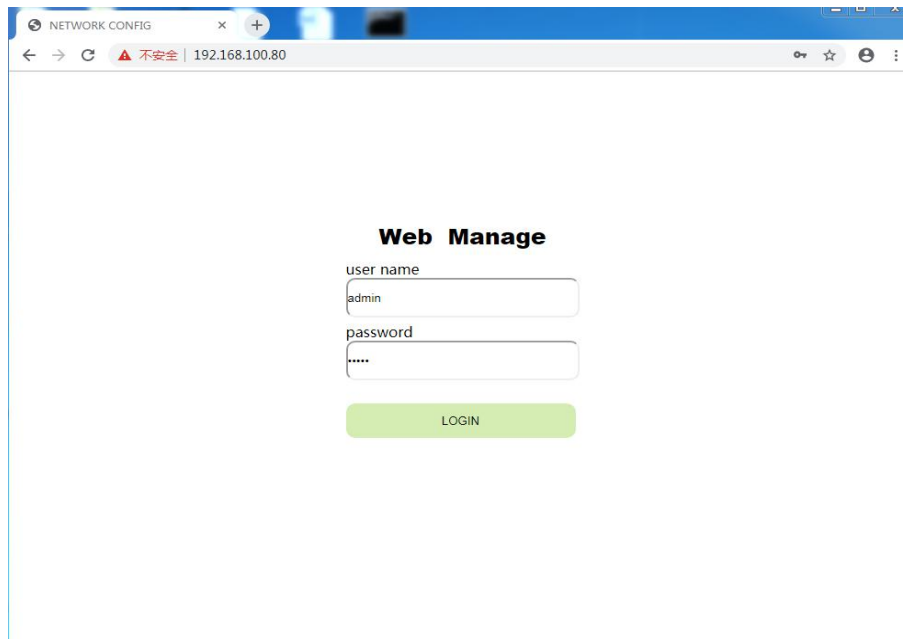
1. Find the IP address of the device on the device label or in the menu of the LCD panel. The default IP address is 192.168.100.80. Set the IP address of the network card of the computer to the same network segment as the device, as shown in the figure .





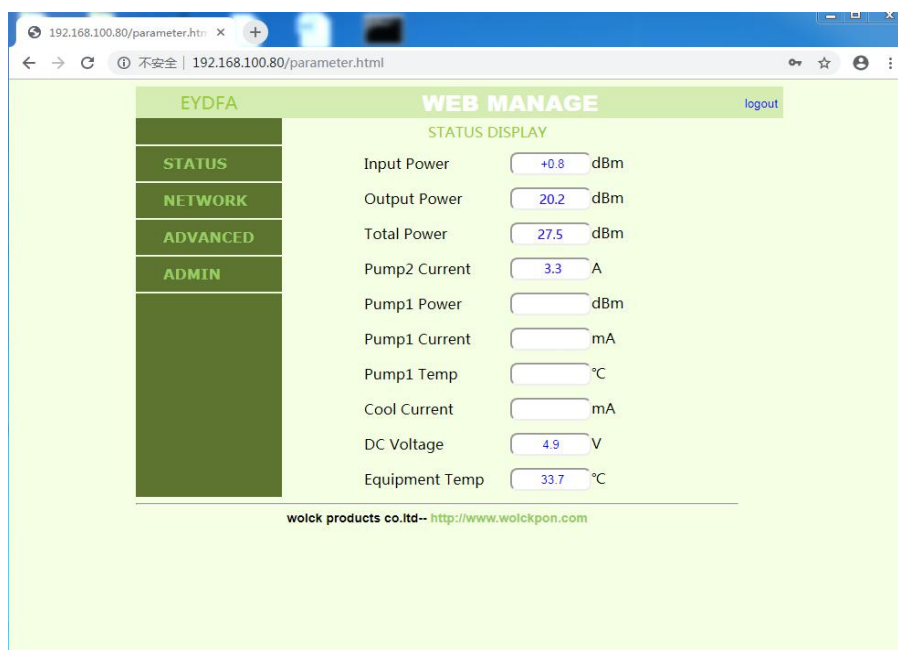


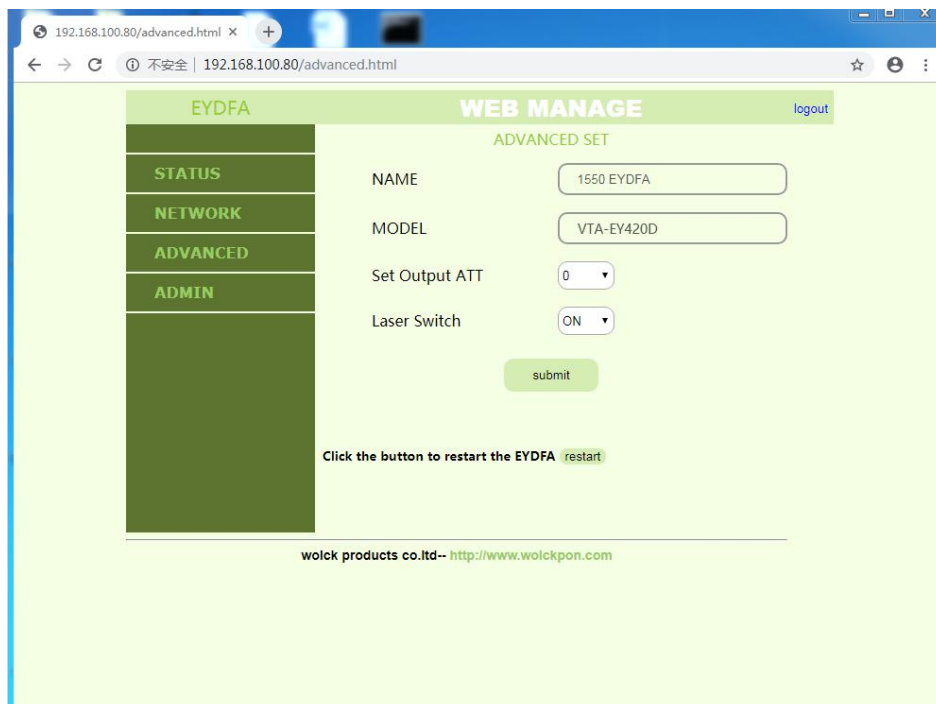
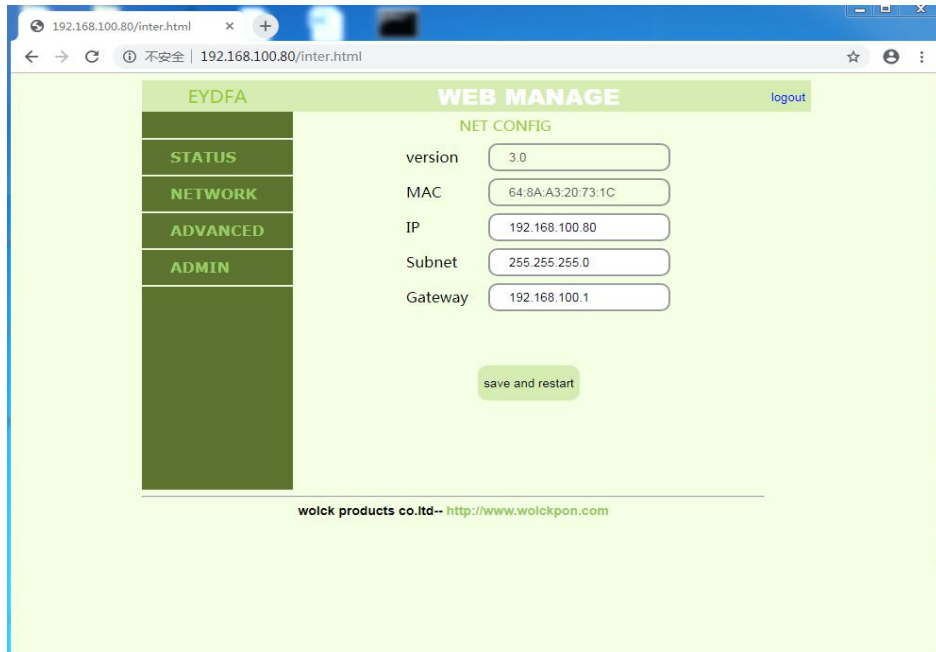
1. Open the browser and enter the device IP address :192.168.100.80 in the browser address bar

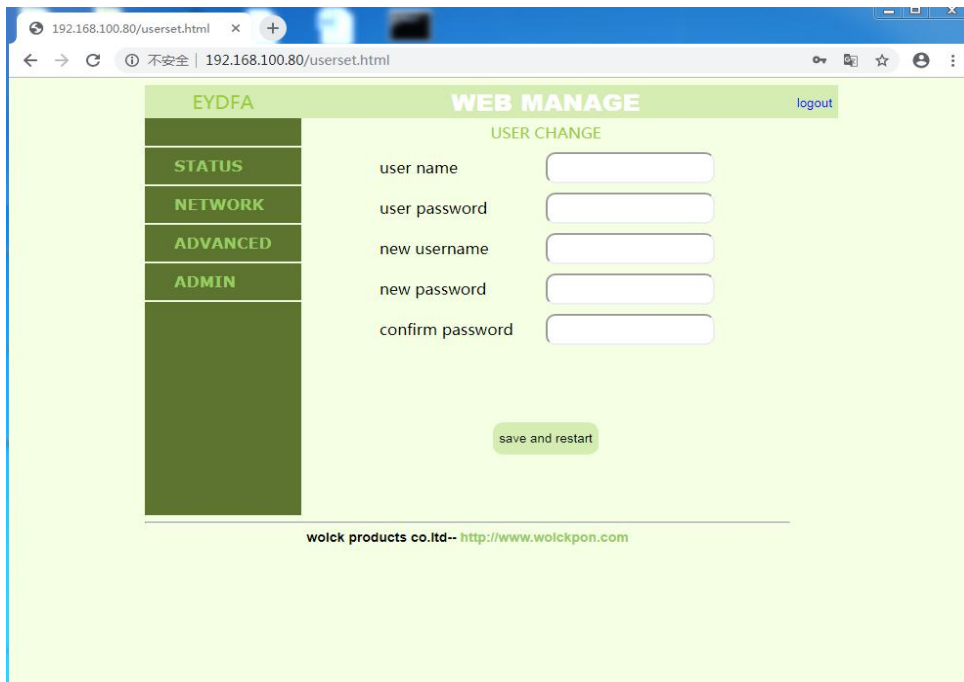


User Name: admin  
Password: admin

2. The default display interface. The navigation bar is on the left and the corresponding information is displayed on the right







## V. Notes

1. The core device of the optical amplifier laser is a kind of electrostatic sensitive device. Please pay attention to the electrostatic protection when storing, and do not put it together with corrosive articles.
2. Do not block the cooling hole, keep good ventilation environment, ensure the working Temperature of the equipment within  $0^{\circ}\text{C} \sim 55^{\circ}\text{C}$ .
3. Please maintain good grounding environment for power supply system.
4. The laser power of fiber amplifier is very high. please do not point the laser at human Body or eyes .the eyes can cause blindness !
5. Non-professional personnel please do not open the machine or remove equipment Components.
6. If you need to clean the optical power machine test contacts and tail fiber ends, please choose non-aqueous industrial alcohol, not medical alcohol.
7. Please do not repeatedly measure the light power value, to avoid improper testing damage to the output tail fiber head, resulting in a decrease in the output light power.

## VI. Solution to some ordinary problem

1. INPUT light is red:

Reason:

No 1550nm optical signal input or input below -10dbm

Solution:

Input the optical signal at 1550nm and ensure that the optical signal is greater than -10dbm

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

Reason:

1. the optical meter is not very correct.
2. The optical power input to the optical amplifier is too small or the optical wavelength value is deviated.
3. too big loss in the test pigtail.
4. Dust or scratch on the fiber connection head.

Solution:

Try to use better optical testing equipment and pigtail fiber, clean with anhydrous alcohol before testing.

### **Note:**

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

## VII. warranty term

The product that my company produces, from the day that the user receives goods, go up in material and manufacturing craft press warranty agreement to guarantee, repair free of charge in guarantee period.

**Note:** we are not responsible for any damage caused by improper packing of returned products

The following situation is not covered by the warranty:

1. During the warranty period, the user shall not unseal, repair or change any part of the equipment, or the company shall not be responsible for the consequences caused thereby.
2. During the warranty period, faults caused by improper use of storage assembly or accidents by users are not covered by the warranty.
3. If the warranty period is exceeded, our company will provide free repairs for life, but the user will have to pay the material fee.