



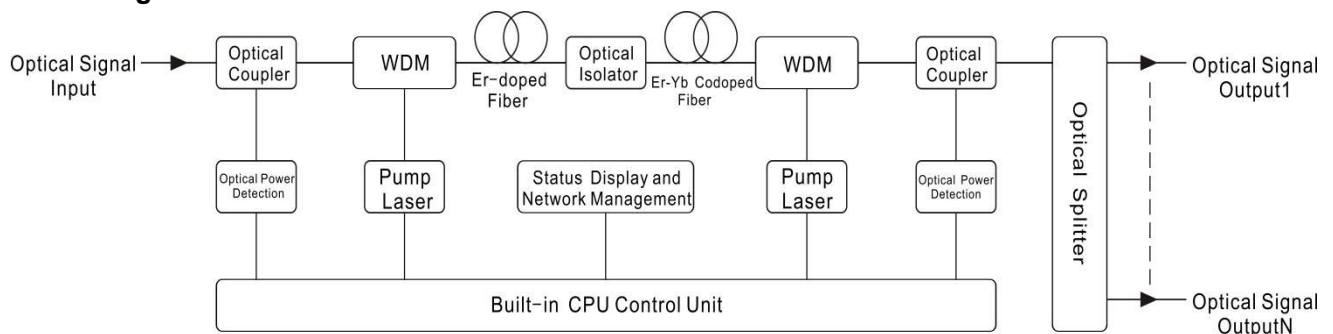
### 1 Product Overview

WE-1550-YZ-YW series are outdoor Er-Yb co-doped optical fiber amplifiers, with high stability and constant output, are mainly used for FTTB or FTTH optical fiber transmission network. The core devices adopt high reliable Pump lasers and are equipped with APC and ATC servo circuits controlled by high precise MCU for real-time monitoring of bias current, TEC cooler bias current and laser temperature to ensure the stable output optical power and the reliable system.

### 2 Features

- Adopt high stable pump laser with low distortion and high output optical power.
- Adopt high-performance Er-Yb codoped fiber, high energy conversion efficiency.
- The maximum total output power is up to +36 dBm; output ports 4 ~ 16 optional.
- Built-in APC and ATC servo circuits controlled by high precise MCU; the output optical power is -0.5 ~ +3 dBm continuously adjustable.
- Cast aluminum housing, built-in LED screen display, support Ethernet transponder.

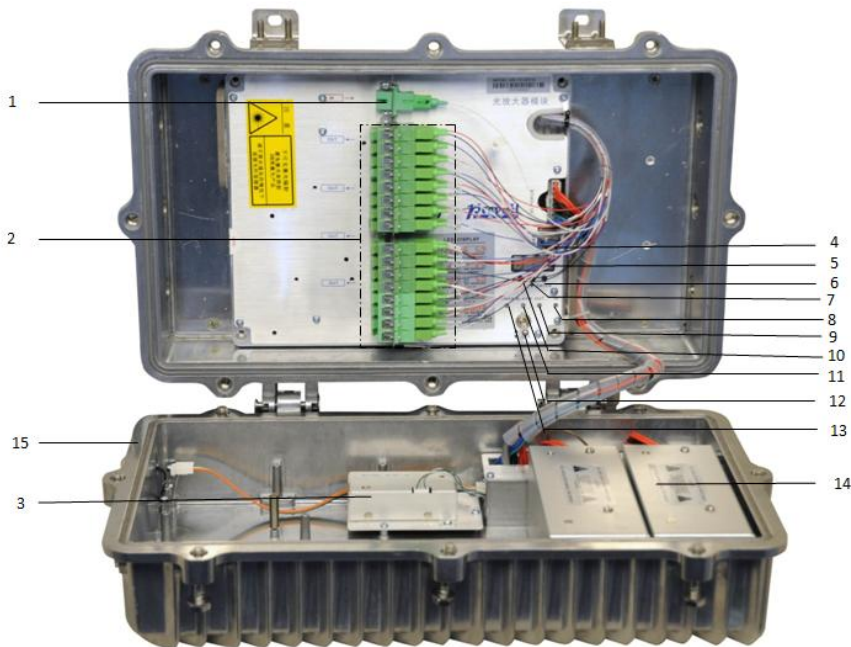
### 3 Block Diagram



## 4 Technique Parameter

Item		Unit	Technique parameters
Input Wavelength Range		nm	1545 ~ 1565
Input Optical Power Range		dBm	-10 ~ +10
Overall Output Power		dBm	≤ 36
Output Power per Port		dBm	≥ 22
Output Power Stability		dBm	± 0.5 (@ 0 ~ +10dBm input)
Noise Figure		dB	≤ 5.5 (@ 0dBm input)
Return Loss	Input	dB	≥ 45
	Output	dB	≥ 45
Pump Power Leakage	Input	dBm	≤ -30
	Output	dBm	≤ -30
Optical Connector Type			SC/APC
Power Supply Input Voltage		V	AC 90 ~ 265 (50/60Hz)
Consumption		W	≤ 70
Operating Temperature Range		°C	-30 ~ +55
Storage Temperature Range		°C	-40 ~ +85
Maximum Operating Relative Humidity		%	Max 95% no condensation
Maximum Storage Relative Humidity		%	Max 95% no condensation
Dimension		mm	460 (L) × 270 (W) × 170 (H)

## 5 Structure Description



1.Optical signal input
2.Optical signal output
3.Transponder
4.RJ45 serial port
5.LED nixie tube
6.ENTER button
7.Down/Decrease button
8.Input power indicator
9.Output power indicator
10.Up/Increase button
11.Alarm indicator
12.Slide switch
13.Power indicator
14.Switching power supply
15.External power supply indicators

## 6 Status Display and Operating Instruction

### 6.1 Indicators on the Panel

There are four indicators:

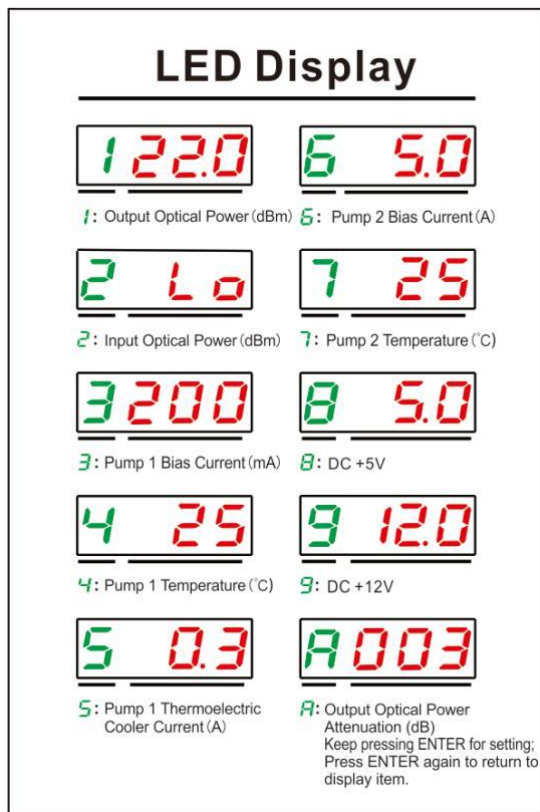
1. Power indicator: Normal work shows green.
2. Input power indicator: When the input optical power is within the range, it shows green, or it shows red.
3. Output power indicator: When the output optical power is within the range, it shows green, or it shows red.
4. Alarm indicator: Normal work shows green. When the input, output or temperature is abnormal, it shows red.
5. External power supply indicators: correspond with the operation of power supply.

### 6.2 Function Button

Function buttons can perform the following operations in one step:

1. Slide switch: Slide properly to operate. ON: PUMP laser is on; OFF: PUMP laser is off.
2. Up/Increase button: for UP operation or ATT increase in the setup menu.
3. Down/Decrease button: for DOWN operation or ATT decrease in the setup menu.
4. Enter button: to enter or save the ATT.

### 6.3 Menu Display Instruction



**Hangzhou Prevail Communication Technology Co., Ltd**

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