1550nm Erbium-doped Fiber Amplifer with PON input

Available for 1RU casing or 2RU casing

Model:EA-1550-W

Brief Introduction

This type high output EDFA Adopts EYDFA technology and mostly used in triple-play and FTTH solution; built-in well-performed CWDM in each output port and every external up-link optical port of optical amplifier can conveniently connect with OLT PON port. Each 1550nm (CATV)'s output optical port multiplex 1310/1490n's data stream, in order to reduce the quantity of the component and improve the index and reliability of the system which save more cost in the network . This type can be compatible with any FTTx PON Technology. It offers a flexible and low-cost solution for three-network integration and Fiber to the Home.

Key Feature

- Adopts EYDFA technology
- Support triple-play and FTTH;
- Support PON inputs
- Maximum output up to 37dBm&Multi-outputs support;
- Support PON inputs
- Support 1310nm/1490nm/1550nm output in one single fiber;
- Adopts Original JDSU,Oclaro and Fitel PUMP Laser;
- Support SNMP

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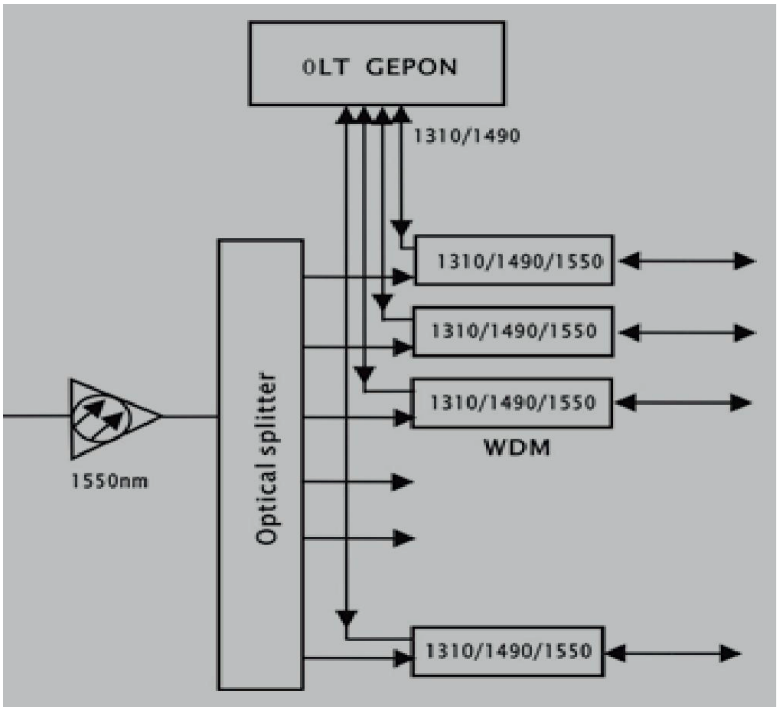
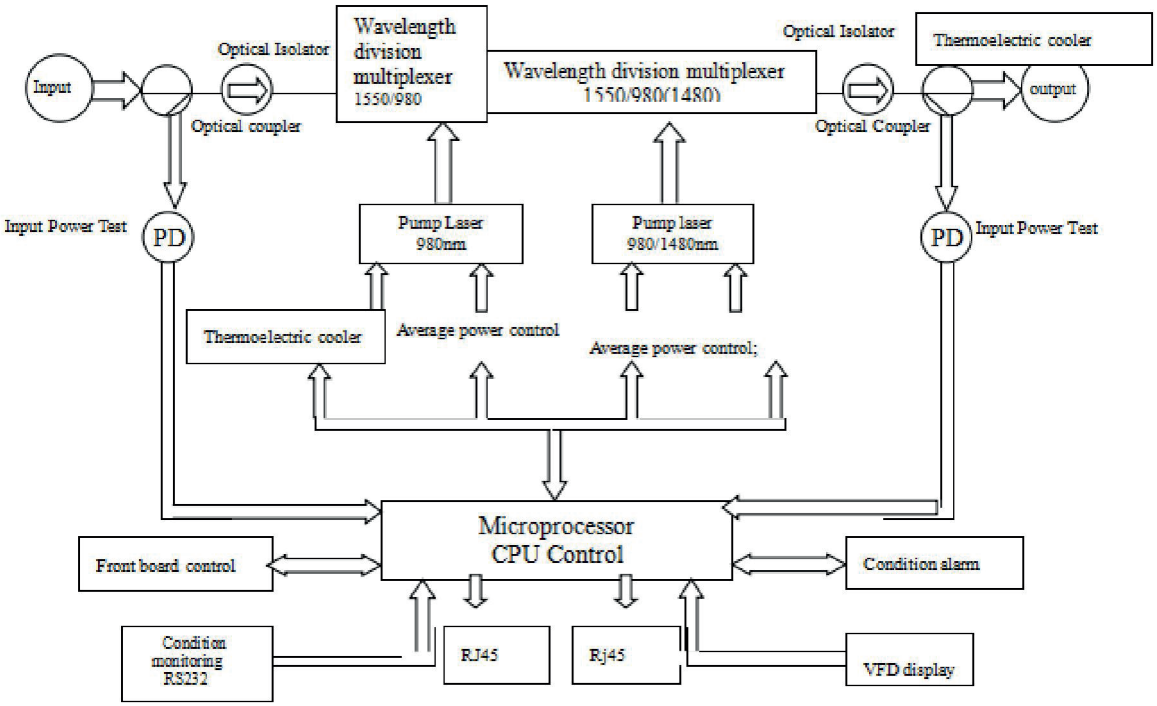
Block Diagram





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Technical Parameter

Model	-27	-28	-29	-30	-31	-32	-33	-34	-35	-36
Output (dBm)	27	28	29	30	31	32	33	34	35	36
Output (mW)	500	630	800	1000	1250	1600	2000	2500	3200	4000
Input power (dBm)	-3～10									
Output point	8、16、32、64									
Wavelength （nm）	1540～1560									
Output power stability (dB)	<±0.2									
C/N (dB)	≥45									
CSO (dB)	≥63									
CTB (dB)	≥63									
Bias oscillation sensitivity (dB)	<0.2									
Bias oscillation dispersio (PS)	<0.5									
Optical return loss （dB）	≥45									
Fiber connector	FC/APC、SC/APC									
Noise ratio （dB）	<5.0(0dBm optical input)									
connector	RJ45(SNMP) 、RS232									
Power loss （W）	≤150									
Working Voltage （V）	220V(90～265)、DC-48V									
Working Temp （℃）	-20～85									
size （mm）	19"×15"×3.5"									

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Important Notes

1. Please avoid eyes directly to output.

2. Please turn off the power first then plug in or out the patch cord

3. EDFA has very small influence on CSO and CTB, but has big influence in C/N. The input optical power influence the C/N. High optical input gets higher C/N. Please see the following data. The minimum optical input should be 4dBm.

C/N and Optical Input

Optical In（dBm）	7	6	5	4	3	2	1	0	-1	-2	-3
C/N（dBm）	52.4	52.2	52.0	51.6	51.1	50.6	50.1	49.5	48.8	48.1	47.3

Normal Trouble Solution

The display in screen of the EDFA shows the correct output of the pump laser, if the output is lower than showed, please check as the following steps.

1. Check the optical meter. Because of the high out of EDFA, please don't use Chinese optical meter to test the EDFA, the advised one is EXFO.
2. The output adapter burnt.
3. The operator plug in and out the patch cord when the power on, this will burnt the output pigtail connector and make the output lower. The solution is to splice a new the pigtail connector.
4. Some operators use the bad quality patch cord and its fiber core is too long, after connected, it will hurts the pigtail of pump laser output. In this condition, in the first test, the output is correct, but in the second time, the output become lower. The solution is also to splice a new pigtail connector.
5. The wavelength of the input deviates far from 1550nm, it will make both the output port and screen show lower.
6. Too low input will make both the output and screen show lower.

Precautions

1. Before installation or operation of unit, please carefully go through the user's manual.
2. EA-1550 Series EDFA should be serviced only by qualified personnel.
3. Before proceeding with installation and/or operation of transmitter, please assure that transmitter is well earthed.
4. EA-1550 series EDFA are Class III laser products. Use of controls, adjustments, and procedures other than those specified herein may result in hazardous laser radiation exposure.

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Warranty Terms

EA-1550 Series EDFA are covered by 12 month Limited Warranty, which starts from the initial date of your purchase. We provide its customer whole-life technical supports. If warranty is expired, repair service only charges parts (if required). In the event that a unit must be returned for service, before returning the unit, please be advised that:

1. Warranty mark pasted on the housing of unit must be in good conditions.
2. A clear and readable material describes model number, serial number and troubles should be offered.
3. Please pack the unit in its original container. If the original container is no longer available, please pack the unit in at least 3 inches of shock absorbing material.
4. Returned unit(s) must be prepaid and insured. COD and freight collect can not be acceptable.

NOTE: we do not assume responsibility for damage caused by improper packing of returned unit(s).

The following situation is not covered by warranty:

1. The unit fails to perform because of operators' faults.
2. Warranty mark is modified, damaged and/or removed.
3. Damage caused by Force Majeure.
4. The unit has been unauthorized alteration and/or repaired.
5. Other troubles caused by operators' faults.

Optical Power Conversion

mW	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
dBm	0.0	3.0	4.8	6.0	7.0	7.8	8.5	9.0	9.5	10.0	10.4	10.8	11.1	11.5	11.8	12.0
mW	17	18	19	20	21	22	25	32	40	50	63	80	100	125	160	200
dBm	12.3	12.5	12.8	13.0	13.2	13.4	14	15	16	17	18	19	20	21	22	23
mW	250	320	400	500	640	800	1000	1280	1600	2000	2560	3200	4000			
dBm	24	25	26	27	28	29	30	31	32	33	34	35	36			