64 Port High Power Fiber Optic Amplifier EDFA

Model: BD-EDFA-3564



Description

The 64 port EDFA is high output power C-Band Er-Yb co-doped double cladding fiber optic amplifier. The key components of the product are high reliability multimode PUMP laser and the double cladding optical fiber. A proprietary ATC (Automatic Temperature Control) and APC (Automatic Power Control) circuit insures the high stability and reliability output power, the unique optical circuit design ensures the excellent optical performance. The high stability and high precision MPU system to ensure the control, adjustment and display are intelligent and easy.

The fiber amplifier employ double cladding Erbium Ytterbium co-doped fiber, and employ the high power multimode pump, with a 10 times Conversion efficiency higher than the single mode general technology, and therefore have a lower relative cost and more compact size and lower power consumption, in particular, for FTTH or FTTB or other large distribution system applications.

Employ intelligent temperature control system: (1)Adopt special temperature control circuit， heat radiating and power consumption can be reduced 30%, (2)The professional air flow design can also ensure the best temperature stability, at the same time powerful fan will start when the case temperature is over 45℃, meanwhile it will stop as the temperature is under 40℃.The technology makes sure the thermal stability of system and fan's long life.

Intelligent network management system. Perfectly network interface: Ethernet network，and the open network management interface ensure the connectivity with all other network management system.

These products are widely used in CATV transmission system and the high power distributing system FTTH requirement. It can be used for CATV analog/digital signal distribution, or match with PON system to construction the triple network integration. (Triple wavelength WDM is optional)

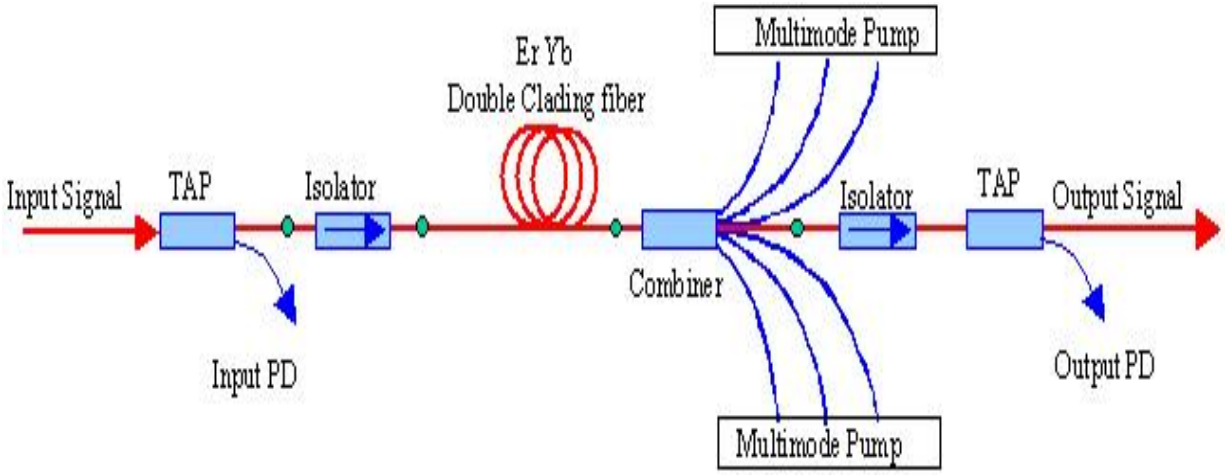
Application

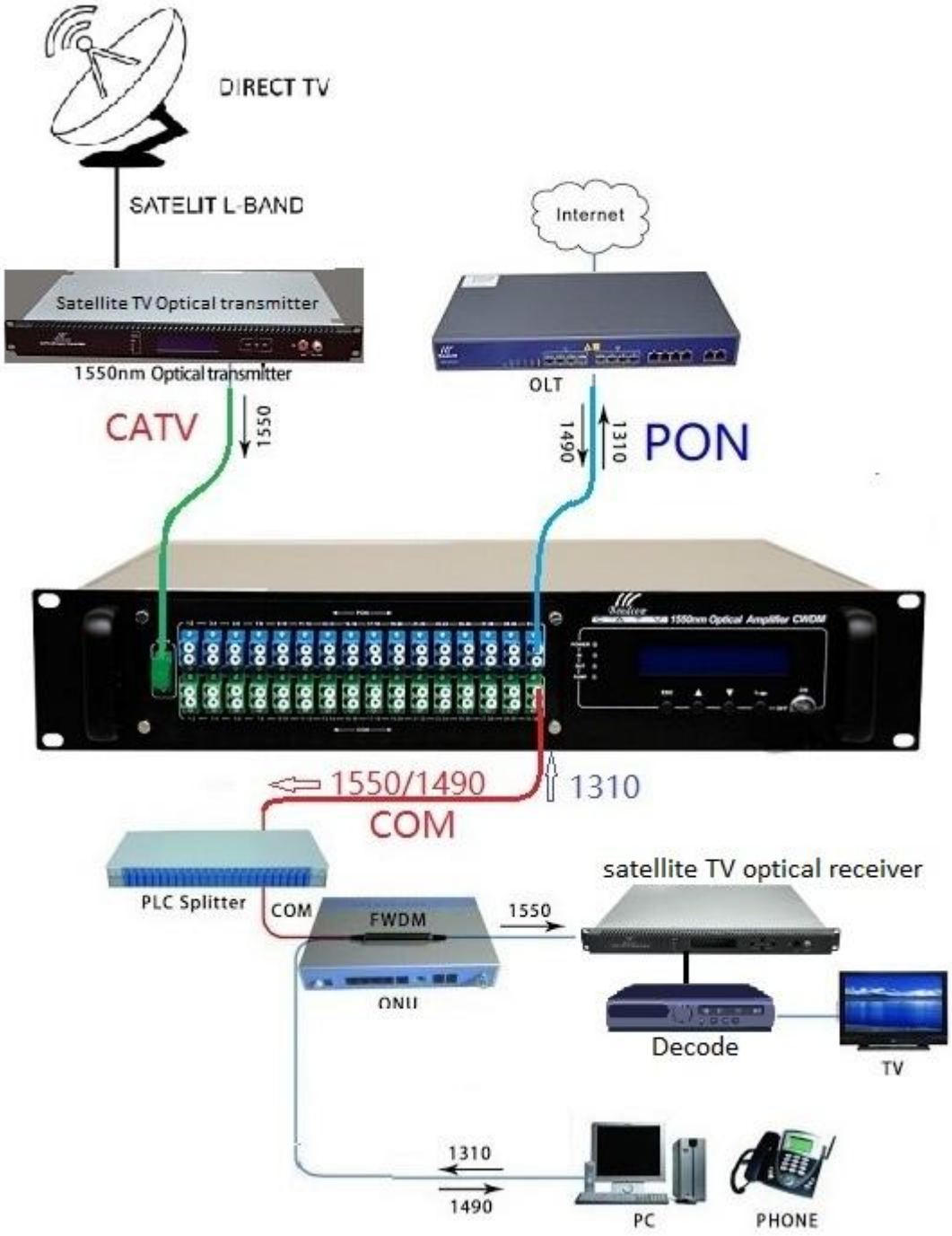
- ◆Analog CATV Transmission
- ◆FTTH Optical Access
- ◆Optical Distribution
- ◆Free Space Optical
- ◆R&D and Training

Feature

- ◆High Power：Up to 2W total，1 Unit for 2000～4000 optical node
- ◆Low Noise Figure：Below 5.5dB (+5dBm input)
- ◆Er Yb co-doped DCF Amplify Technology：Patent Pump Dump Technology
- ◆Low CSO: ＜-70dBc
- ◆23dBm×N，20dBm×N or 17dBm×N output is optional
- ◆Controllability and maneuverability: Dual CPU to deal Control loop and Communication separately
- ◆High Stability And Reliability：MTTF＞150000 Hours
- ◆Redundancy Hot Swap power module: 110/220VAC and 48VDC can plug Mix
- ◆Perfect Network Interface：Ethernet
- ◆Support SNMP network management
- ◆Intelligent Temperature Control System: using a dedicated Temperature control chip which make cooling and power loss reduce 30% than competitors
- ◆Output Power can be Adjustable by network and manual
- ◆Integrated 1310nm，1490nm，1550nm WDM (Optional)
- ◆OEM, Module is available

Block Diagram




DIRECT TV
SATELIT L-BAND
Internet
Satellite TV Optical transmitter
1550nm Optical transmitter
OLT
CATV
1550
1490
1310
PON
1550/1490
COM
1310
PLC Splitter
COM
FWDM
1550
satellite TV optical receiver
ONU
Decode
TV
1310
1490
PC
PHONE

Optical characteristics

Parameter	Symbol	MIN	TYP	MAX	UNITS
Operating Wavelength	λc	1540	1550	1565	nm
Saturated Output Power *Note1*	Po	13	------	33	dBm
Input Power	Pi	-3	------	+10	dBm
Gain	G	------	------	30	dB
Noise Figure *Note2*	NF	------	------	5.5	dB
Output Power Stability	ΔPo	-----	±0.05	±0.2	dB
Input Isolator	ISOi	30	-------	------	dB
Output Isolator	ISOo	30	-------	------	dB
Input Pump Leakage	PLi	-------	-------	-35	dBm
Output Pump Leakage	PLo	-------	-------	-45	dBm
Return Loss	RL	-------	-------	-45	dB
Polarization Dependent Gain	PDG	------	-------	0.3	dB
Polarization Mode Dispersion	PMD	------	-------	0.5	ps

Note 1：Optional

Note 2：Tested at +5dBm Input

Environmental characteristics

Parameter	Symbol	MIN	TYP	MAX	UNITS
Operating Temperature	Tw	-5	-----	60	℃
Storage Temperature	Ts	-40	-----	80	℃
Humidity Note	------	10	------	90	%

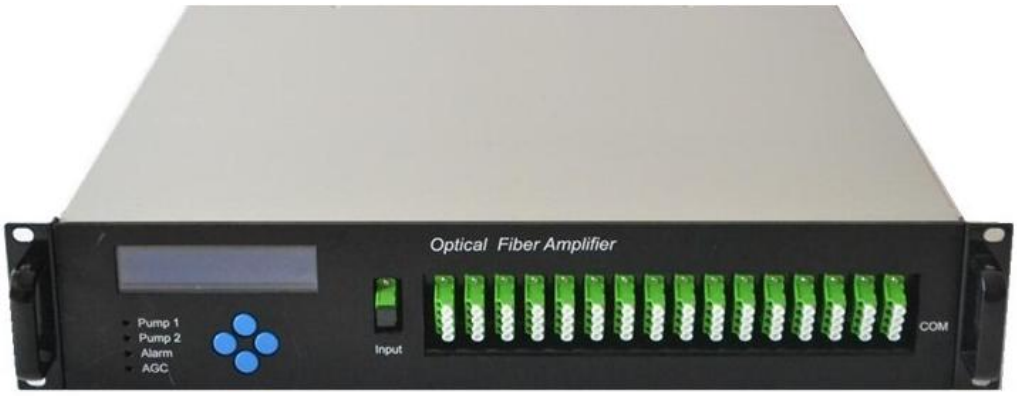
Note: No Condensate

Electrical Characteristics

Parameter	Symbol	MIN	TYP	MAX	UNITS
Power Supply（1）	Vps	170		264	VAC
Power consumption	P	-----	-----	50	W

1: 110VAC，220VAC and -48VDC is optional, and duplicate supply is optional.

Front-Panel、Back-Panel





Order information:

BD-EDFA-3564	64ports fiber amplifier, dual power
BD-EDFA-3564-PON	64ports fiber amplifier, built-in WDM, for PON application, dual power