

## YOUXIN-HFA1550 series High power fiber amplifier



### Overview:

With more than more popular use of optic network, especially fiber to the house (FTTH), high power fiber amplifier will play more important role increasingly. Normal EDFA (Erbium-doped fiber amplifier) optic output power only reaches 25dBm (316mw), and its general usage scope is 13~23dBm (20~200mw). However, YOUXIN-HFA series high power fiber amplifier adopts multimode pumping laser and double-package layer erbium-doped /ytterbium technology to make the output power up to 40dBm (10000mw), theoretically equivalent to 60 sets of 20dBm EDFA's work, which greatly meet thousands of users' needs in large-scaled FTTH distribution network application.

YOUXIN-HFA1550 series high power fiber zoom device core devices used high reliability of more die Pump laser and double package layer fiber, used unique of APC (automatically power control) and ATC (automatically temperature control) circuit, makes output power stable degrees high, and reliability good; unique of light road design guarantee excellent of light road index; used high stable and high precision of MPU (YOUXIN processor) system using regulation, and displayed convenient, and reliable, and intelligent.

YOUXIN-HFA1550 series high power fiber amplifier adopts unique intelligent temperature control system, using special temperature control chip to make the equipment heat less than 25% compared with conventional circuit; professional heat dissipation design to ensure the temperature stability, and the powerful fan starts to work when equipment temperature reaches up to 45°C, and the fan stopped to work when temperature is below 40°C, in this way can make sure the fan's life span and thermal stability of the system.

YOUXIN-HFA1550 series high power fiber amplifier with the features of intelligent monitoring and management system. With Ethernet interface and open network management interface to make sure connectivity with any network management.

YOUXIN-HFA1550 series high power fiber amplifier can be widely used in CATV optical transmission system, and FTTH required high power power distribution systems.

## Features:

- ◆ 2U, 19" standard case, easy installation.
- ◆ Extra high power output up to 10W, one set can drive 3000 ~6000 pieces optical node.
- ◆ Low noise figure: lower than 5dB when input is 0dBm.
- ◆ Very low CSO deterioration: <-65 dBc
- ◆ multiple output port of 4, 8, 16, 32 , 64
- ◆ Large LED screen display
- ◆ Built-in network management responder complying with SNMP protocol, which can achieve remote control for the equipment.
- ◆ Intelligent temperature-control system: adopting special temperature-control chip, compared to regular product, heat-dispating and consumption reduce by 25%.
- ◆ Adjustable output power: Output optical power adjustable range (downward 3dB).
- ◆ 1310nm, 1490nm, 1550nm WDM(Optional) can be integraed.

## Performance parameters:

Item		Unit	Data
Working bandwidth		nm	1535~1565
input optic power		dBm	-5~+10
output power		dBm	28~40
Noise figure(note 1)		dB	≤5.0
output power stability		dB	±0.2
Optical return loss		dB	≥50
Pump leakage	input	dBm	≤-35
	output	dBm	≤-35
Polarization relevant gain		dB	≤0.3
Polarization membrane dispersion		ps	≤0.5
Optic Connector			SC/APC or LC/APC
Power Supply Voltage		V	AC110~265 (50~60Hz) or DC48V
Power Consumption		W	≤50 (≤36dBm)      ≤80 (≥37dBm)
Working Temperature		℃	-5~+50
Max.. Working Relevant Humidity		%	Max. 85%, no condensation
Storage Temperature		℃	-40~+80
outer size		mm	483×440×88
weight		Kg	5.8

## Specifications: With PON port (built-in WDM)

Model Number	Total output power	Output ports	Output power by each port	Optical connector
YOUXIN-HFA2128-08	28dBm(0.63W)	8	16.5	SC/APC LC/APC
YOUXIN-HFA2128-16		16	13	SC/APC LC/APC
YOUXIN-HFA2129-08	29dBm(0.8W)	8	17.5	SC/APC LC/APC
YOUXIN-HFA2129-16		16	14	SC/APC LC/APC
YOUXIN-HFA2130-08	30dBm(1.0W)	8	18.5	SC/APC LC/APC
YOUXIN-HFA2130-16		16	15	SC/APC LC/APC
YOUXIN-HFA2131-08	31dBm(1.26W)	8	19.5	SC/APC LC/APC
YOUXIN-HFA2131-16		16	16	SC/APC LC/APC
YOUXIN-HFA2132-08	32dBm(1.6W)	8	20.5	SC/APC LC/APC
YOUXIN-HFA2132-16		16	17	SC/APC LC/APC
YOUXIN-HFA2132-32		32	13.5	SC/APC LC/APC
YOUXIN-HFA2133-08	33dBm(2.0W)	8	21.5	SC/APC LC/APC
YOUXIN-HFA2133-16		16	18	SC/APC LC/APC
YOUXIN-HFA2133-32		32	14.5	SC/APC LC/APC
YOUXIN-HFA2134-08	34dBm(2.5W)	8	22.5	SC/APC LC/APC
YOUXIN-HFA2134-16		16	19	SC/APC LC/APC
YOUXIN-HFA2134-32		32	15.5	SC/APC LC/APC
YOUXIN-HFA2135-16	35dBm(3.2W)	16	20	SC/APC LC/APC
YOUXIN-HFA2135-32		32	16.5	SC/APC LC/APC
YOUXIN-HFA2136-16	36dBm(4.0W)	16	21	SC/APC LC/APC
YOUXIN-HFA2136-32		32	17.5	SC/APC LC/APC
YOUXIN-HFA2137-16	37dBm(5.0W)	16	22	SC/APC LC/APC
YOUXIN-HFA2137-32		32	18.5	SC/APC LC/APC
YOUXIN-HFA2137-16	38dBm(6.3W)	16	23.0	SC/APC LC/APC
YOUXIN-HFA2137-32		32	19.5	SC/APC LC/APC
YOUXIN-HFA2138-64		64	16	LC/APC
YOUXIN-HFA2139-32	39dBm(7.9W)	32	20.5	SC/APC LC/APC
YOUXIN-HFA2139-64		64	17.0	LC/APC
YOUXIN-HFA2140-32	40dBm(10.0W)	32	21.5	SC/APC LC/APC
YOUXIN-HFA2140-64		64	18.0	LC/APC

## Without PON port (without WDM)

Model Number	Total output power	Output ports	Output power by each port	Optical connector
YOUXIN-HFA2228-08	28dBm(0.63W)	8	17.5	SC/APC LC/APC
YOUXIN-HFA2228-16		16	14.0	SC/APC LC/APC
YOUXIN-HFA2229-08	29dBm(0.8W)	8	18.5	SC/APC LC/APC
YOUXIN-HFA2229-16		16	15.0	SC/APC LC/APC
YOUXIN-HFA2230-08	30dBm(1.0W)	8	19.5	SC/APC LC/APC
YOUXIN-HFA2230-16		16	16.0	SC/APC LC/APC
YOUXIN-HFA2231-08	31dBm(1.26W)	8	20.5	SC/APC LC/APC
YOUXIN-HFA2231-16		16	17.0	SC/APC LC/APC
YOUXIN-HFA2232-08	32dBm(1.6W)	8	21.5	SC/APC LC/APC
YOUXIN-HFA2232-16		16	18.0	SC/APC LC/APC
YOUXIN-HFA2232-32		32	14.5	SC/APC LC/APC
YOUXIN-HFA2233-08	33dBm(2.0W)	8	22.5	SC/APC LC/APC
YOUXIN-HFA2233-16		16	19.0	SC/APC LC/APC
YOUXIN-HFA2233-32		32	15.5	SC/APC LC/APC
YOUXIN-HFA2234-08	34dBm(2.5W)	8	23.5	SC/APC LC/APC
YOUXIN-HFA2234-16		16	20.0	SC/APC LC/APC
YOUXIN-HFA2234-32		32	16.5	SC/APC LC/APC
YOUXIN-HFA2235-16	35dBm(3.2W)	16	21	SC/APC LC/APC
YOUXIN-HFA2235-32		32	17.5	SC/APC LC/APC
YOUXIN-HFA2236-16	36dBm(4.0W)	16	22	SC/APC LC/APC
YOUXIN-HFA2236-32		32	18.5	SC/APC LC/APC
YOUXIN-HFA2236-64		64	15.0	SC/APC LC/APC
YOUXIN-HFA2237-16	37dBm(5.0W)	16	23.0	SC/APC LC/APC
YOUXIN-HFA2237-32		32	19.5	SC/APC LC/APC
YOUXIN-HFA2237-64		64	16.0	SC/APC LC/APC
YOUXIN-HFA2237-32	38dBm(6.3W)	32	20.5	SC/APC LC/APC
YOUXIN-HFA2237-64		64	17.0	SC/APC LC/APC
YOUXIN-HFA2237-32	39dBm(7.9W)	32	21.5	SC/APC LC/APC
YOUXIN-HFA2237-64		64	18.0	SC/APC LC/APC
YOUXIN-HFA2237-32	40dBm(10.0W)	32	22.5	SC/APC LC/APC
YOUXIN-HFA2237-64		64	19.0	SC/APC LC/APC