

High Power OFA for FTTH

HA943X Series



Features

- High power: up to 10W total, 1Unit for 2000~4000 optical node
- Low Noise Figure: below 6dB (@0dBm input)
- Low CSO: < -70dBc
- Output: 23dBmXN, 20dBmXN or 17dBmXN; The output power is adjustable.
- Controllability and maneuverability: Dual CPU to deal Control loop and communication separately
- High stability and reliability: MTBF > 150000 hours
- Redundancy Hot Swap Power module:
- Support Telnet and SNMP network management
- OEM is available

Application

1. Analog CATV Transmission
2. FTTH Optical Access
3. Optical Distribution
4. Free Space Optical

Description

The product is high output power C-Band Er-Yb co-doped double cladding optical fiber amplifier. 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.

These products are widely used in CATV transmission system and the high power distributing system FTTH requirement. It can be used for 640channel CATV analog/digital signal distribution, or match with PON system to construction the triple network integration. (Triple wavelength WDM is optional)

Optical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Wavelength	λ_c	1545	1550	1565	nm
Output Power ⁽¹⁾	Po	-----	-----	40	dBm
Input power	Pi	-10	-----	+10	dBm
Output Port	G	-----	-----	64	
Noise Figure ⁽²⁾	NF	-----	5.5	6	dB
Output power stability	ΔP_o	-----	± 0.2	± 0.5	dB
Input Isolator	ISOi	30	-----	-----	dB
Output Isolator	ISOo	30	-----	-----	dB
Input Pump Leakage	PumpLin	-----	-----	-30	dBm
Output Pump leakage	PumpLout	-----	-----	-30	dBm
Return Loss	RL	50	-----	-----	dB
PDG	PDG	-----	-----	0.5	dB
PMD	PMD	-----	-----	0.5	ps

(1) : Optional

(2) : Test at 0dBm input

Electric Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Power supply	Vps	-70	-48	-40	VDC
Consumption ※	P	-----	-----	80	W

※Actual consumption depend on the output power and environment temperature

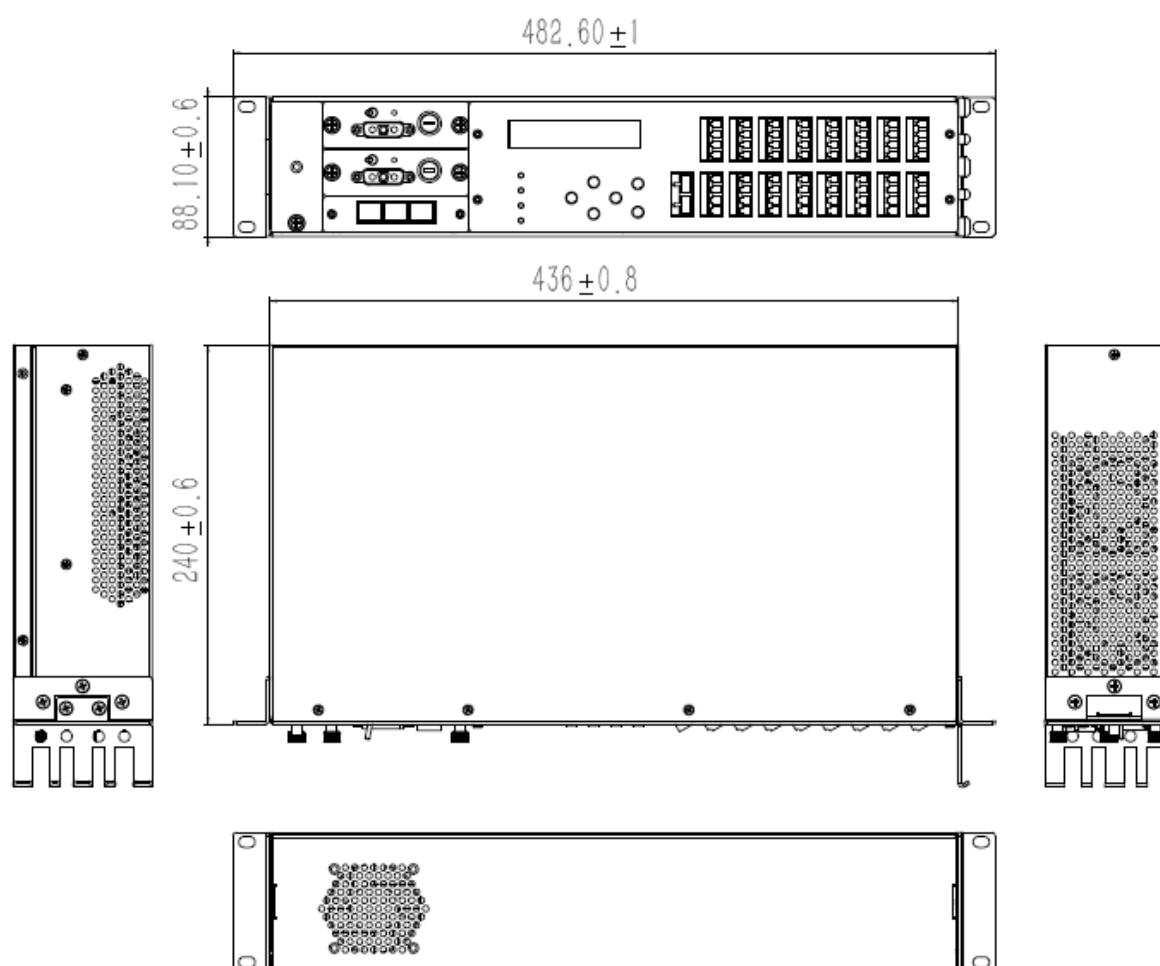
Environmental Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tw	-5	-----	60	°C
Storage Temperature	Ts	-40	-----	85	°C
Humidity	-----	0	-----	95	%

(3) : Non-condensing

Mechanical Dimension

HA943X: 483*240*88 (mm)



Order Information

H A — — —

Category	Structure	Application	Input power	Output power per port	Output port	Voltage	Interface	WDM
HA: High power Amplifier	94: 2U Dual power supply structure	3: CATV	1:- 10~10dBm 9:Other	n: ndBm	1:1 port ... 64: 64 port	4:-48VDC 9: Other	2;SC/APC 6:LC/APC 9: Other	0: W/O 1: W/