

GWA3530 Series 1550nm Fiber Amplifier

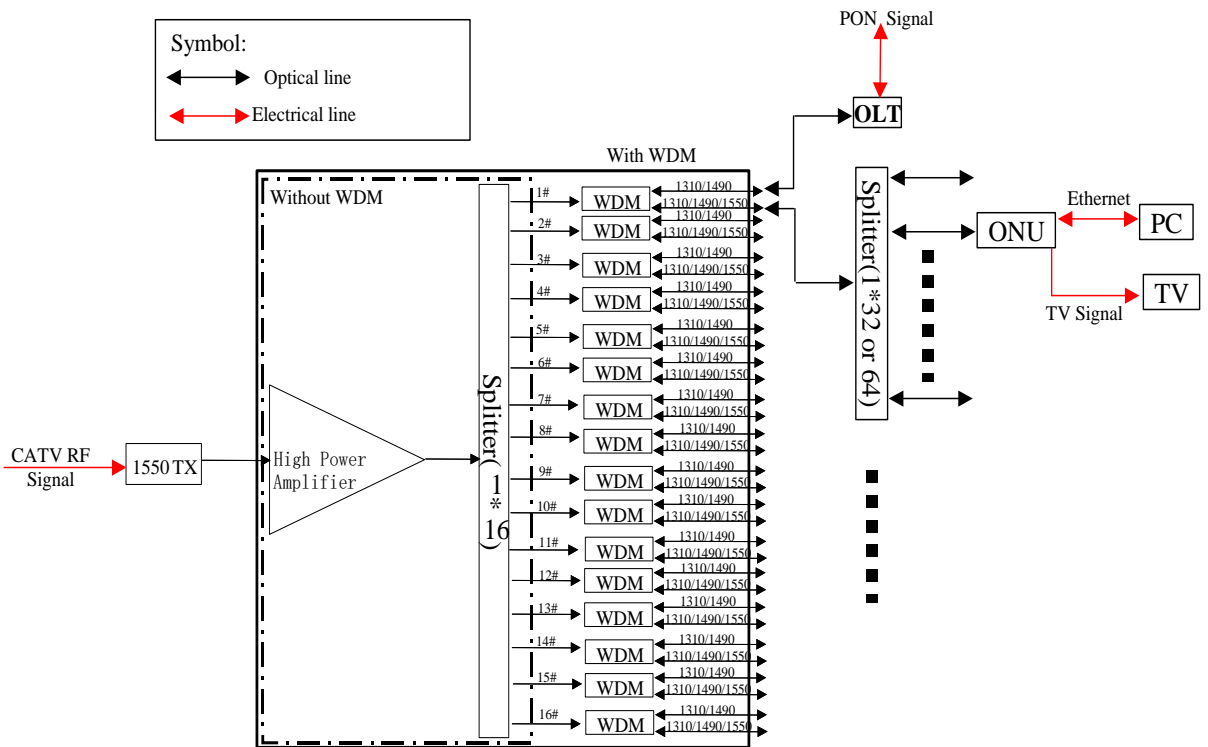
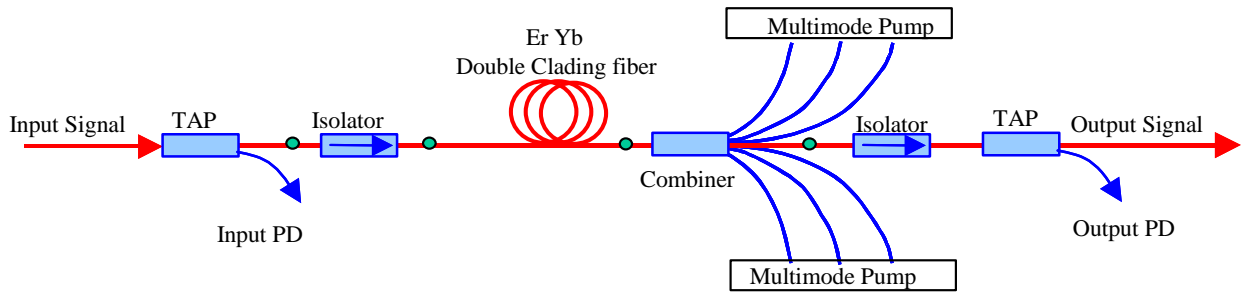
With up to 35dBm 1550nm output, GWA3530 series Er-Yb Doped Fiber Amplifiers are important 1550nm relay transmission equipments for High performance supertrunking links, High power distribution networks, Fiber Deep architectures and FTTx networks. GWA3530 Fiber Amplifier is designed to meet the most demanding noise performance requirements of CATV and FTTx applications. GWA3530 fiber amplifier provides optical isolation on the input and output of the gain block for stable, low noise operation. The input and output optical signal power levels are detected for monitoring and control. The input optical signal is amplified with active gain control for a constant output power level, or with active output power control for constant gain mode. GWA3530 series optical amplifiers also provide monitoring functions and associated alarms for all vital characteristics. The optical output of the GWA3530 series optical amplifiers can be split into up to 64 ports by an optional internal splitter.



Features

- High adjustable output power: maximum 40dBm
- Fiber output supporting multi-ports: 20dBm×N or 17dBm×N
- Low NF: Typical <5.5dB @+5dBm input
- Extremely low CSO distortion: < -70dBc
- Dual CPU dealing with amplifier local controller and remote communication
- High stability and reliability: MTBF ≥150000 hours
- Dual Hot-swappable 110V AC or -48V DC Power supplies
- Ethernet, RS485 and RS232 network interfaces
- Supporting Telnet and SNMP network management
- Intelligent temperature control system: Employ special temperature control chip, radiating and power consumption can be reduced 30%
- Built-in 1310nm,1490nm,1550nm WDM(Optional)
- RoHS Complied
- Bellcore GR-1312-CORE Complied

Block and Application Diagram



EPON System Diagram

Specifications

Optical Parameter

Parameters	Symbol	Min.	Typ.	Max.	Unit
Wavelength(CATV)	λ_c	1545	1550	1570	nm
Wavelength(PON)	λ_{R1}	1260	1310	1360	nm
Wavelength(PON)	λ_{R2}	1480	1490	1500	nm
Output port ⁽¹⁾				64	
Output Power (Total)		30		40	dBm
Input Power	Pi	-3	-----	+10	dBm
Each output power	Po	17		22	dBm
Noise Figure ⁽²⁾	NF	-----	5.5	6	dB



Output power stability	ΔP_o	-----	± 0.2	± 0.5	dB
Input/Output Isolator	ISO i/o	30	-----	-----	dB
Input/output Pump Leakage	PumpL in/out	-----	-----	-30	dB
Return Loss	RL	50	-----	-----	dB
PDG	PDG	-----	-----	0.5	dB
PMD	PMD	-----	-----	0.5	ps

(1): Optional

(2): Test at 0dBm input

Power Supply

Power Supply: AC: 90V~240V (50/60 Hz) or -48V DC

Power Consumption: $\leq 50W$

Environment

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_w	-5		60	$^{\circ}C$
Storage Temperature	T_s	-40		80	$^{\circ}C$
Humidity		10		85	%

Physical Parameters

Weight: $\leq 20Kg$

Dimensions (mm): 483 × 240 × 88 (19" 2RU)

Ordering Information

GWA3530-AB-C-D-E-F High Power Fiber Optical Amplifier in 19" 2RU

AB (Output Power): 30_30dBm, 35_35dBm, 40_40dBm

C (Output Ports): 04_4 ports, 08_8 ports, 16_16 ports, 32_32 ports, 64_64 ports

D (Connector): LA_LC/APC SA_SC/APC

E (Power Supply): Default _single 220V AC, 48_single -48V DC,

AA_Two AC power supplies, DD_Two DC Power supplies;

AD_AC and DC power supplies

F (1310nm/1490nm/1550nm WDM at each fiber output port): Default_None, W_WDM