

## GWA3530 Series 1550nm Fiber Amplifier

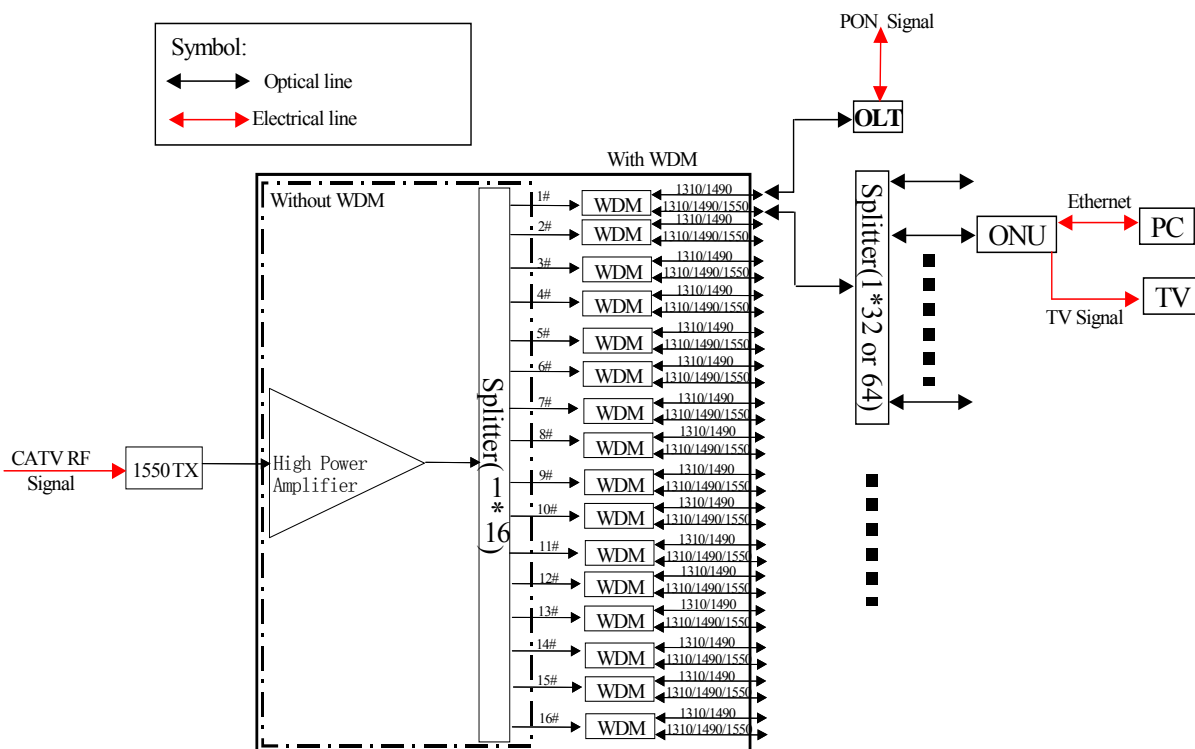
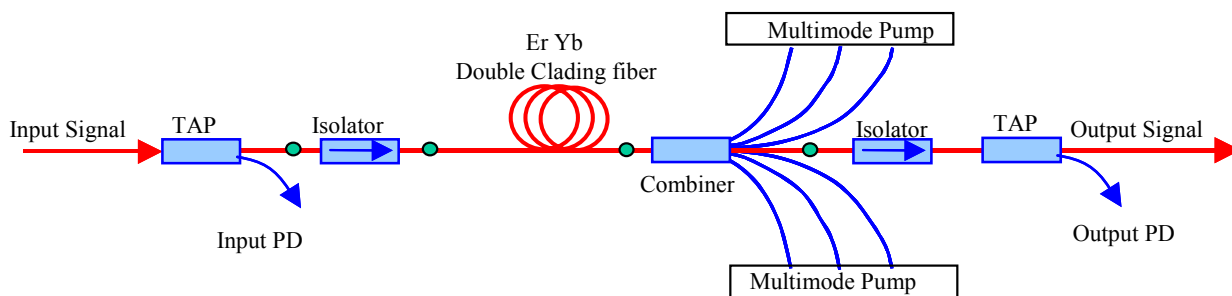


With up to 35dBm 1550nm output, GWA3530 series Er-Yb Doped Fiber Amplifiers are important 1550nm relay transmission equipments for High performance supertrunking links, High power distribution networks, Fiber Deep architectures and FTTx networks. GWA3530 Fiber Amplifier is designed to meet the most demanding 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 20 ports by an optional internal splitter.

### Features

- High adjustable output power: maximum 35dBm
- 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: MTTF ≥150000 hours
- Dual Hot-swappable Power supplies
- Ethernet, RS485 and RS232 network interfaces, SNMP Complied
- Intelligentized 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

Parameter	Symbol	Min	Typ	Max	Unit
Wavelength	$\lambda_c$	1540	1550	1565	nm
Saturated Output Power	Po	30	33	35	dBm
Input Power	Pi	-3		+10	dBm
Gain	G			30	dB
Noise Figure*	NF			6	dB

Output Power Stability	$\Delta P_o$		$\pm 0.05$	$\pm 0.2$	dB
Input Isolator	ISO <sub>i</sub>	30			dB
Output Isolator	ISO <sub>o</sub>	30			dB
Input Pump Leakage	PumpLin			-35	dB
Output Pump Leakage	PumpLout			-45	dB
Return Loss	RL			-45	dB
Polarization Dependent Gain	PDG			0.3	dB
Polarization Mode Dispersion	PMD			0.5	ps

\* Tested at +5dBm optical input

### Power Supply

Power Supply: AC: 90V~265V (50/60 Hz) or -48V DC

Power Consumption:  $\leq 50W$

### Environment

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	T <sub>w</sub>	-5		60	°C
Storage Temperature	T <sub>s</sub>	-40		80	°C
Humidity		10		85	%

### Physical Parameters

Weight:  $\leq 20Kg$

Dimensions (mm): 19" × 14.76" × 3.44" (19" 2RU)

### Ordering Information

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

AB (Output Power): 30\_30dBm, 33\_33dBm, 35\_35dBm

C (Output Ports): 01\_1 port, 02\_2 ports, 04\_4 ports, 08\_8 ports, 16\_16 ports, 20\_20 ports

D (Connector): FA\_FC/APC SA\_SC/APC

E (Power Supply): AC\_90~265V AC, DC\_-48V DC power supply

F (1310nm/1490nm/1550nm WDM at each fiber output port): Default\_None, W\_WDM