



V·SOL

YEDFA V8616 Datasheet V1.2



- ✓ Support network management
- ✓ No mechanical lock, software intelligent switch
- ✓ Easy cleaning and maintenance for fiber port
- ✓ Power double backup

Access the world



Product overview

The V8616Y Series Ytterbium and Erbium Doped Fiber Amplifiers (YEDFA) is designed for use in CATV、FTTX and HFC application. It is optimized for 1550nm wavelength and is packaged in a 2U 19" rack housing. The product offering is flexible enough to perform all the requirements of CATV、FTTX and HFC applications. The device chooses a high performance PUMP laser and circuit (include ACC and APC) and optical output power is adjustable and flexible for network link loss budget. The V8616Y series also provide monitors and associated alarms for all vital characteristics. The status and management of the device can be monitored and managed either from the VFD front panel display or remotely via Ethernet based-SNMP . The device also support multptical output by build-in PLC splitter and FWDM (1310nm/1490nm) optical multiplexer for Triple-play FTTX network applications.



Key features

- ◆ Standard 19 inch 1U/2U Rack YEDFA
- ◆ Output port from 4/8/16/32ports optional
- ◆ Output powers rang from 16~22dBm optional
- ◆ Output power adjustable -3 ~ 0dB
- ◆ Wide input dynamic range(0 to +10dBm)
- ◆ High Isolated input & output(30dB for max)
- ◆ Low power consumption
- ◆ Front Panel Key Switch for pump on/off control
- ◆ FWDM optional
- ◆ Automatic Power Control (APC) or Automatic Current Control (ACC)
- ◆ VFD Panel Status Indicator for local monitor
- ◆ Remote management via SNMP (Ethernet Interface)

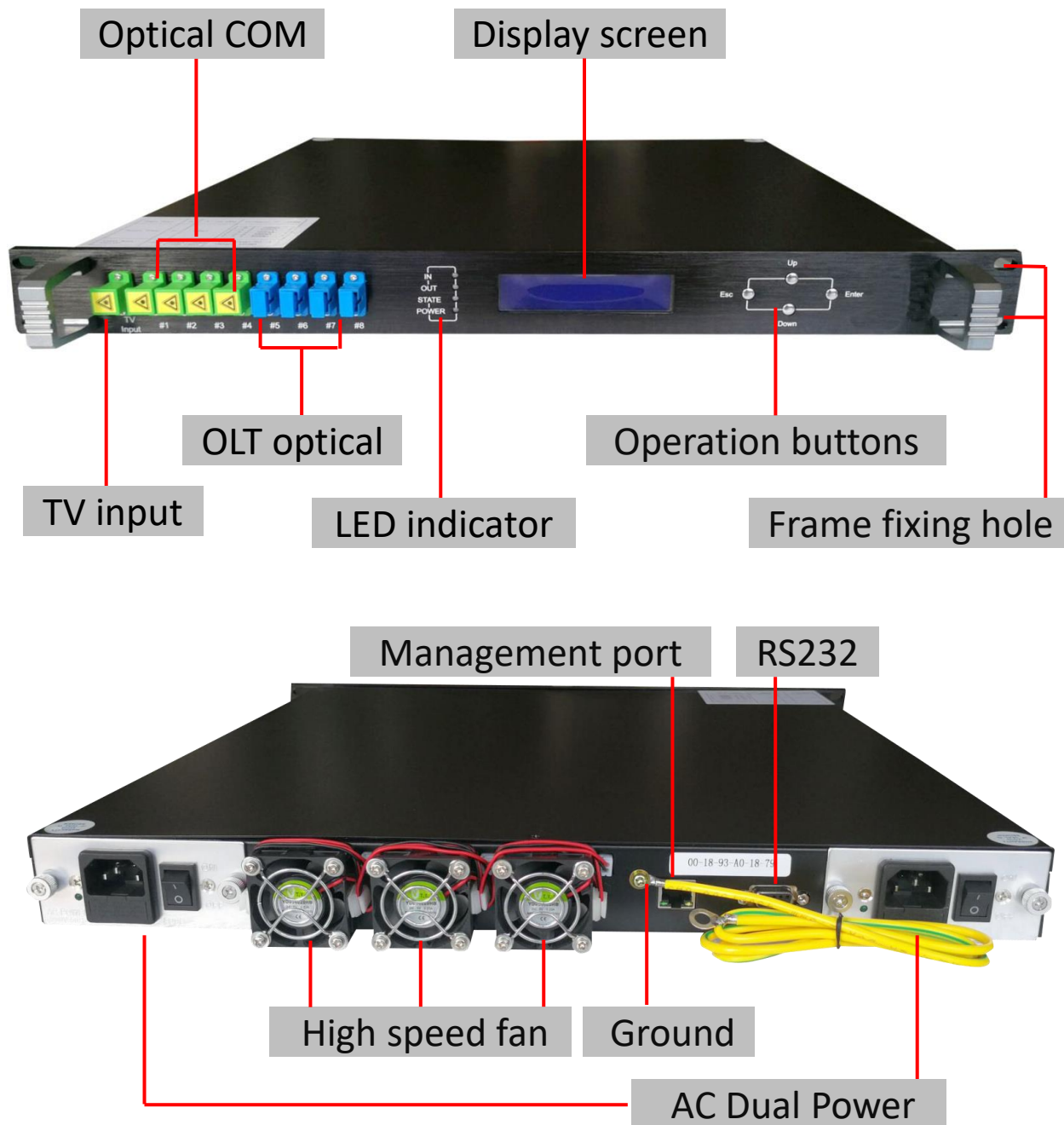
Management

- ◆ Support VSOL EMS management
- ◆ Support secondary development



Functional characteristics

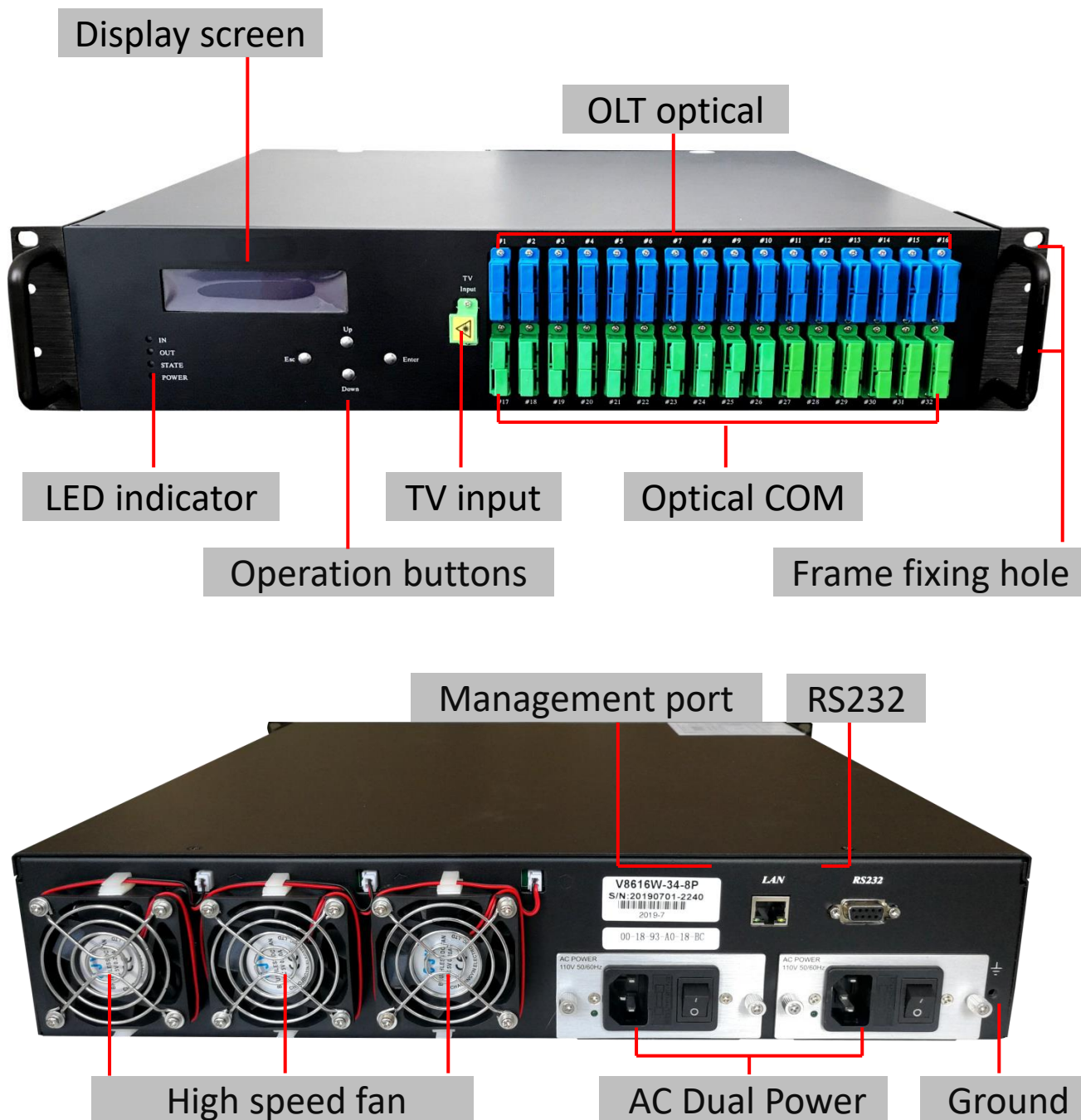
Product appearance features—1U





Functional characteristics

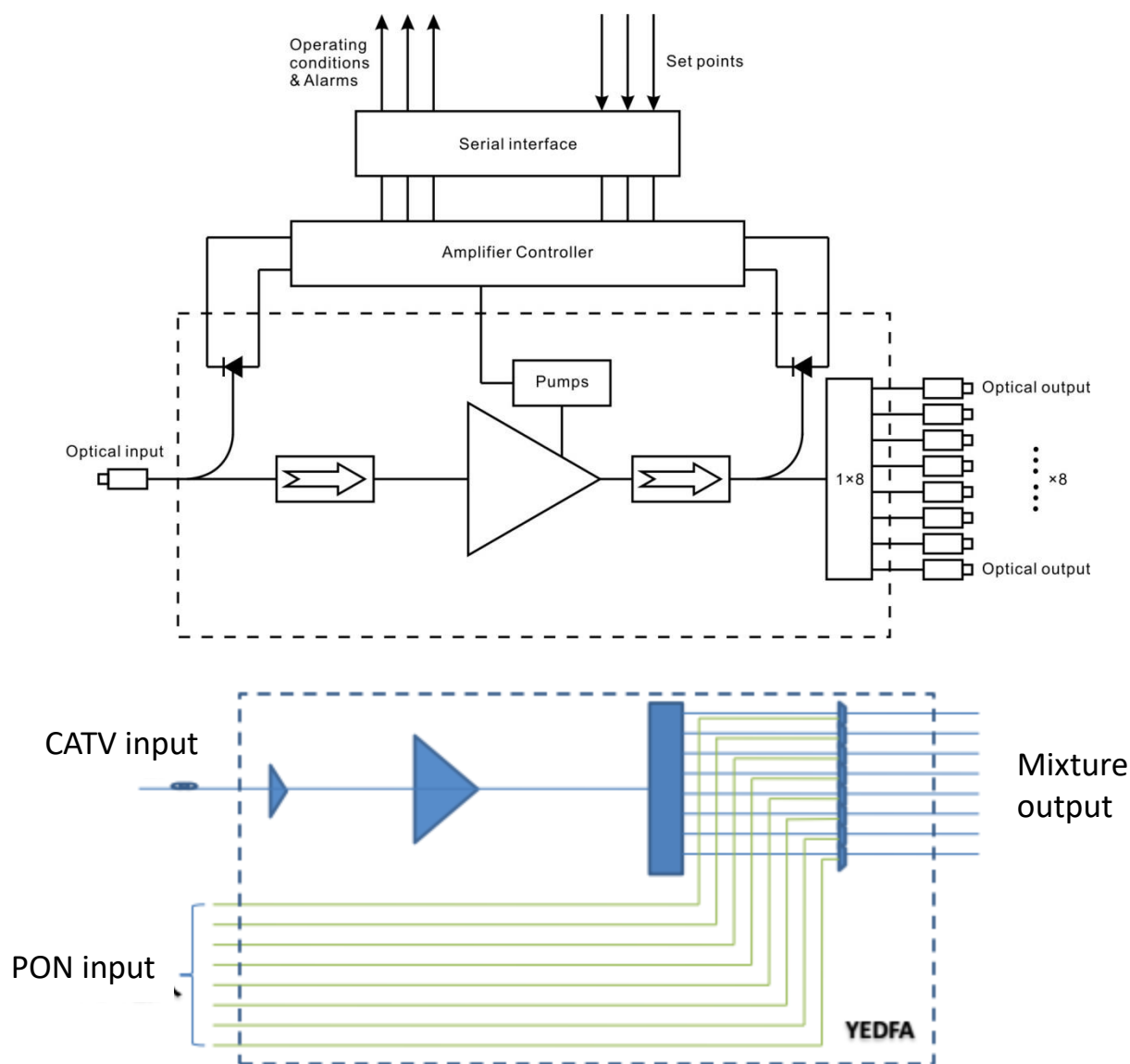
Product appearance features—2U





Functional characteristics

Operating principle





Technical indicator

Description	Unit	Value	Conditions
Optical Specifications			
Wavelength	nm	1540~1560	
Input Power	dBm	0~10	1550nm
Output Power	dBm	16~22	@+6dBm Input
Output Power Stability	dB	0.1	@+6dBm Input
Noise Figure	dB	4(max 5)	@+6dBm Input
Isolation (Input/Output)	dB	30	
Return Loss (Input/Output)	dB	55	
Polarization Dependent Gain	dB	max 0.5	
Polarization Mode Dispersion	ps	max 0.5	
Electrical Specifications			
Communication Interface		RJ45, RS-232	9600bps
Input voltage	V	AC: 90~265V	DC: -48V (optional)
Consumption	W	50 maximum 100 maximum	For others For 32 Port*22dBm
Fuse	A	2	
Connector	IEC	Male power connector	
Environmental Specifications			
Operating Temperature	°C	-5 ~50	
Storage Temperature	°C	-20~85	
Storage Humidity	RH%	≤95	No Condensation
Mechanical Specifications			
Dimension (LxWxH)	mm	483 × 422 × 88	Carton:590 × 590 × 200
Weight	kg	<11.7	
Mounting		19" EIA rack, 2U Rack	4Port & 8Port(whichout WDM) is 1U



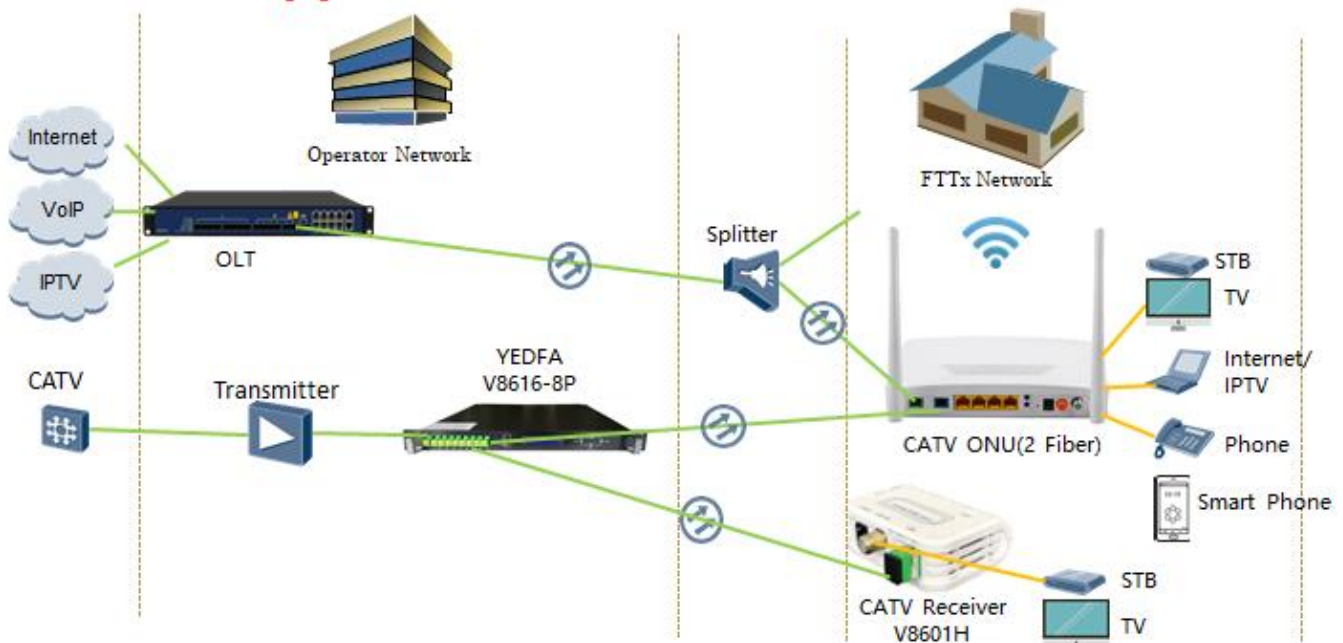
Specification describe

	4 Port	8 Port	16 Port	32 Port
No WDM	 V8616-4P	 V8616-8P	 V8616-16P	 V8616-32P
With WDM	 V8616W-4P	 V8616W-8P	 V8616W-16P	 V8616W-32P
Dimension (H x W x D) (mm)	43 × 483 × 422	44 × 483 × 422	88 × 483 × 422	
		88 × 483 × 422		
weight(kg)	5.5	5.5	11.5	11.7
		11.5		
Output of Port(dBm)	V8616-24-4P:4*17 V8616-27-4P:4*19 V8616-30-4P:4*21 V8616W-24-4P:4*17 V8616W-27-4P:4*19 V8616W-30-4P:4*21	V8616-29-8P:8*17 V8616-31-8P:8*19 V8616-34-8P:8*22 V8616W-29-8P:8*17 V8616W-31-8P:8*19 V8616W-34-8P:8*22	V8616-31-16P:16*16 V8616-34-16P:16*19 V8616-36-16P:16*22 V8616W-31-16P:16*16 V8616W-34-16P:16*19 V8616W-36-16P:16*22	V8616-34-32P:32*16 V8616-36-32P:32*19 V8616-40-32P:32*22 V8616W-34-32P:32*16 V8616W-36-32P:32*19 V8616W-40-32P:32*22
LD Bias Alarm Range (mA)	V8616(w)-24-4P: >1000mA,<2800mA V8616(w)-27-4P: >1000mA,<3000mA V8616(w)-30-4P: >1500Ma,<3500mA	V8616(w)-29-8P: >1000mA,<2800mA V8616(w)-31-8P: >1000mA,<3000mA V8616(w)-34-8P: >1500Ma,<3500mA	V8616(w)-31-16P: >1000mA,<3300mA V8616(w)-34-16P: >1500mA,<4800mA V8616(w)-36-16P: >1800mA,<4600mA	V8616(w)-34-32P: >1500mA,<4800mA V8616(w)-36-32P: >1800mA,<4600mA V8616(w)-40-32P: >1800mA,<4600mA

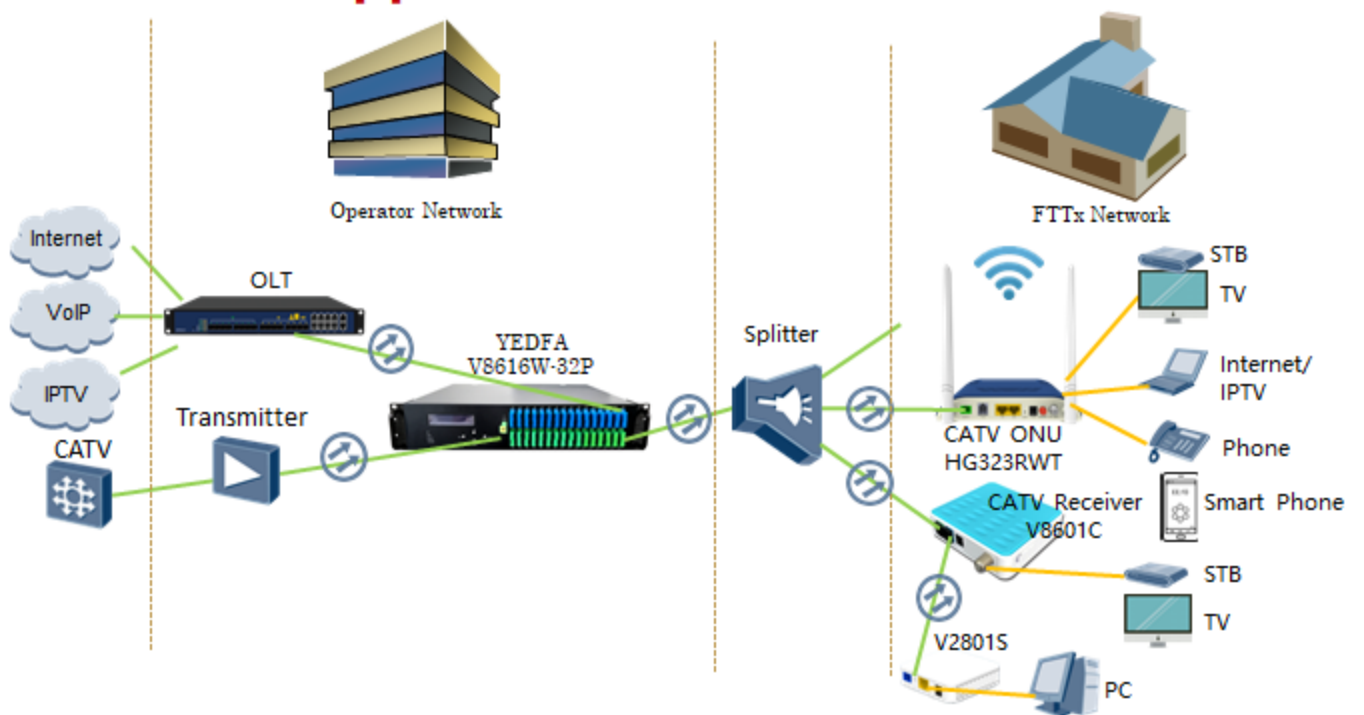


Typical application diagram

CATV Application-YEDFA without WDM



CATV Application-YEDFA with WDM



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