# **High Power EYDFA System**

### **50EYA Series 1U High Power EYDFA**

The 50EYA series EYDFA is an optical amplifier offering multi-port signal amplifier ranging from 1535 nm to 1565 nm. The amplifier is designed for applications of CATV and applications of 1-8 continuous band channel (ITU wavelength). It can operate at single wavelength in CATV and triple wavelength in WDM systems. This equipment of great importance in CATV backbone network can realize flat transmission in DWDM system. It supplies a flexible and low-cost solution for large-area FTTH coverage of the CATV system in large and medium cities.

#### **Characteristics**

- Low NF pre-amplification, no cascade required, reduced CNR and MER
- Output power adjustable from 23 dBm to 37 dBm
- Perfect net management interface, compatible with SNMP protocol
- Double power supply, automatic temperature control
- · LCD, on-site parameter monitoring
- · High stability and reliability

#### **Applications**

- CATV
- FTTH



# **Specifications**

Product Type	EYA-S-C-1U-XX/XX*①				
Parameters	Minimum	Typical	Maximum		
Wavelength (nm)	1535	1550	1565		
Input Power (dBm)	-5	3	10		
Output Power (dBm)	26	-	37		
Number of output port	SC:16/32; LC:32/64				
Output Power of Single Port (dB)	10	-	23		
Output Power Stability (dBm)	±0.1				
Gain (dB)	-	40	-		
Gain Flatness (dB)	-				
Noise Figure (dB)	≤ 6.0 (P <sub>in</sub> =0dBm)				
Return Loss (dB)	≤ -45				
Polarization Dependent Loss (dB)	< 0.3				
Polarization Dependent Gain (dB)	< 0.4				
Pump Power Leakage (dBm)	<- 30				
Operating Temperature (°C)	-5	-	55		
Storage Temperature (°C)	-40	-	85		
Power Supply (V)	AC220(160 - 265) /AC110 (90 - 130) /DC48 (38 - 58)				
Power Consumption (W)	-	-	50		
Communication Protocol	RS232/485				
Optical Connector	LC/APC or Customized				
Dimensions (mm)	482(L)×357(W)×44(H)				

 $<sup>^\</sup>star \textcircled{1}$  EYA-S-C-1U-XX/XX, the first XX means gain and the second XX means output power

### **50EYA Series 2U High Power EYDFA**

The 50EYA series EYDFA has high output power. Operating wavelength ranging from 1535 nm to 1565 nm on this amplifier is designed for CATV and applications of 1-8 continuous band channel. This equipment is very important in CATV backbone net building. It can operate at a single wavelength in CATV and three wavelengths in WDM systems and realize flat transmission in DWDM. It supplies a flexible and low-cost solution for large-area FTTH coverage of the CATV system in big and medium cities.

#### **Characteristics**

- Output power from 33 dBm to 40 dBm
- · APC/ACC/AGC control
- Low NF pre-amplification, no cascade required, reduced CNR and MER
- Output power adjustable from 0.5 dBm to 4 dBm
- Completed net management interface, compatible with SNMP protocol
- Double power supplies, automatic temperature control
- · LCD, on-site parameter monitoring
- · High stability and reliability

#### **Applications**

- CATV
- FTTH
- · Doppler lidar system

## **Specifications**

Product Type	EYA-S-C-2U-XX/XX*①				
Parameters	Minimum	Typical	Maximum		
Wavelength (nm)	1535	1550	1565		
Input Power (dBm)	-5	3	10		
Output Power (dBm)	33	÷	40		
Number of output port	SC:16/32/64; LC:32/64				
Output Power of Single Port (dB)	10	÷	23		
Output Power Stability (dBm)	± 0.1				
Gain (dB)	-	40	-		
Gain Flatness (dB)	-				
Noise Figure (dB)	≤ 6.0 (P <sub>in</sub> =0dBm)				
Return Loss (dB)	≤ 45				
Polarization Dependent Loss (dB)	< 0.3				
Polarization Dependent Gain (dB)	< 0.4				
Pump Power Leakage (dBm)	< -30				
Operating Temperature (°C)	-5	-	55		
Storage Temperature (°C)	-40	-	85		
Power Supply(V)	AC220(160 - 265) /AC110 (90 - 130) /DC48 (38 - 72)				
Power Consumption (W)	-	-	100		
Communication Protocol	RS232/485				
Optical Connector	LC/APC or Customized				
Dimensions (mm)	482(L)×450(W)×89(H)				

 $<sup>^\</sup>star \odot$  EYA-S-C-2U-XX/XX, the first XX means gain and the second XX means output power

### **50EYA Series 3U High Power EYDFA**

The 50EYA series EYDFA has high output power. Operating wavelength ranging from 1535 nm to 1565 nm on this amplifier is designed for CATV and applications of 1-8 continuous band channel. This equipment is very important in CATV backbone net building. It can operate at a single wavelength in CATV and three wavelengths in WDM systems and realize flat transmission in DWDM. It supplies a flexible and low-cost solution for large-area FTTH coverage of the CATV system in big and medium cities.

#### **Characteristics**

- · Max output power 43 dBm
- Low NF pre-amplification, no cascade required, reduced CNR and MER
- Parameters can be set to fulfill the different net design
- The internal optical switch can be added to expand device capability
- Output port channels from 32 to 128, WDM available

- Low noise figure:5 dB@3 dBm input
- Completed net management interface, compatible SNMP protocol
- Double power supplies, automatic temperature control
- Output power adjustable from 0.5 dBm to 4 dBm
- True color LCD

### **Applications**

- CATV
- FTTH
- Doppler lidar system

#### **Specifications**

Product Type	EYA-S-C-3U-XX/XX*①				
Parameters	Minimum	Typical	Maximum		
Wavelength (nm)	1535	1550	1565		
Input Power (dBm)	-5	3	10		
Output Power (dBm)	1-		43		
Number of output port	SC:16/32/64; LC:32/64/128				
Output Power of Single Port (dB)	10	÷ .	23		
Output Power Stability (dBm)	± 0.1				
Gain (dB)		43	-		
Gain Flatness (dB)	-				
Noise Figure (dB)	≤ 6.0 (P <sub>in</sub> =0dBm)				
Return Loss (dB)	≤-45				
Polarization Dependent Loss (dB)	< 0.3				
Polarization Dependent Gain (dB)	< 0.4				
Pump Power Leakage (dBm)	<-30				
Operating Temperature (°C)		-			
Storage Temperature (°C)	-5	-	55		
Power Supply (V)	-40	AC160 - 250/ AC100 - 130/ DC38 - 58	85		
Power Consumption (W)	,	-	,		
Communication Protocol	-	RS232/485	150		
Optical Connector	LC/APC or Customized				
Dimensions (mm)	482(L)×482(W)×132.5(H)				

 $<sup>^\</sup>star \odot$  EYA-S-C-3U-XX/XX, the first XX means output power and the second XX means gain