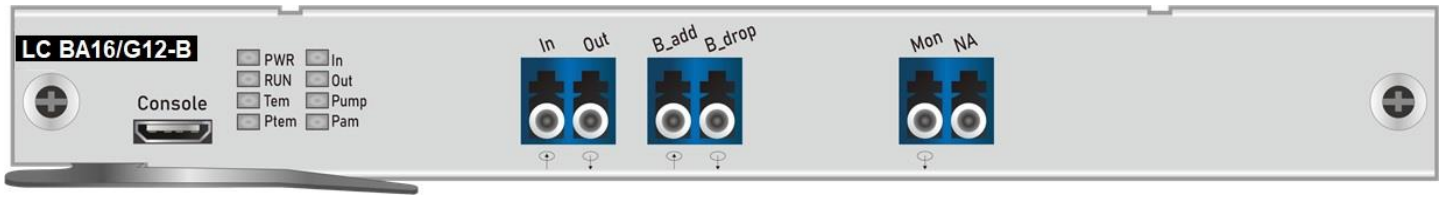
Single Fiber Bidirectional Optical Amplifier Board EDFA

DWDM.ME's Single Fiber Bidirectional Optical Amplifier Board EDFA Amplifier models include a Red and a blue port designed for single fiber DWDM Solution. The design ofthese models is used for single-fiber DWDM transmission systems.



Function

- C-band optical signal overall amplification
- Covering the wavelength range of 1528 ~ 1561nm
- Support systems to achieve different cross-section radio repeater transmission

Highlight

- Operating wavelength range:
  - Blue: 1528nm~1543nm
  - Red: 1547nm~1561nm
- Low noise figure: typ 5dB
- Excellent gain flatness
- Multiple operating modes:
  - AGC adjustable Gain
  - APC output is adjustable
  - ACC voltage adjustable
- Mid-stage access for DCM or OADM
- Offset the insertion loss introduced by DCM
- Reduce the additional degradation of system OSNR
- Flexible insertion of DCMs at different distances
- Optional OSC channel for remote management
- MON port, on-line monitoring optical power and OSNR

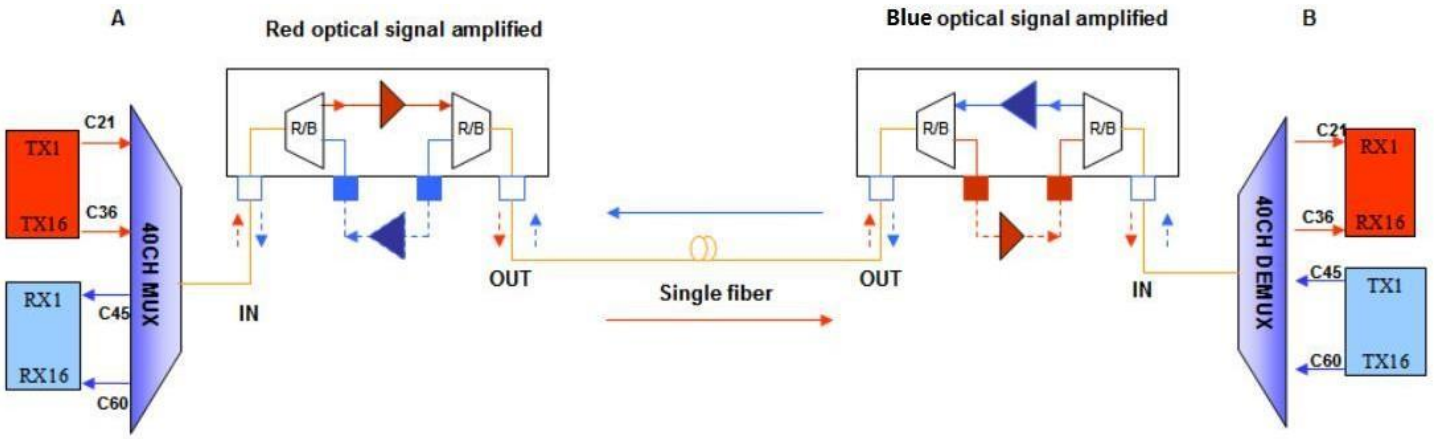
DWDM.ME's single fiber bidirectional optical amplifier board EDFA include an Red and blue port.

Red optical amplifier include an blue out port and blue in port, Red optical amplifier Amplify red optical signal, blue out port and blue in port are used to access the amplifier to amplify the blue optical signal.

Blue optical amplifier include an red out port and red in port, Blue optical amplifier Amplify blue optical signal, red out port and red in port are used to access the amplifier to amplify the red optical signal, Blue: 1528nm~1543nm. Red: 1547nm~1561nm.

Performance Parameter

Parameter		Min.	Typical	Max.	Unit
Operating Wavelength Blue		1528		1543	nm
Operating Wavelength Red		1547		1561	nm
Output Power				22	dBm
Gain		8		33	dB
Input Power	BA	-10		Max.Output -Gain	dBm
	PA/LA	(Max.input-29)		Max.Output -Gain	
Noise Figure			5.0		dB
Gain Flatness			1.0		dB
Input Threshold		-34		Can be adjusted	dBm
Polarization Dependence Loss				0.3	dB
Polarization Dependence Gain				0.4	dB
Polarization Mode Dispersion				0.5	ps
Pump Power Leakage				-29	dBm
Return Loss		45			dB
Size		191 (W) x 253 (D) x 20 (H)			mm
Environment	Operating Temperature	-10℃ ~ 60℃			℃
	Storage Temperature	-40℃ ~ 80℃			℃
	Relative Humidity	5% ~ 95% Non-condensing			
Power Consumption		≤15			W



Common Module

Model	Description	Gain dB	Max.Output dBm	Min.Input dBm	Max.Input dBm	Typ.NF dB
Bidi Booster: Amplify the blue signal (1528~1543)						
LC-BA16/G12-B	Bidi Booster, Max.Output 16dBm, Gain 12dB, With OSC, Amplify the blue signal (1528~1543)	12dB	16dBm	-10dBm	4dBm	5dB
LC-BA16/G12NS-B	BidiBooster, Max.Output 16dBm, Gain 12dB, Without OSC, Amplify the blue signal (1528~1543)	12dB	16dBm	-10dBm	4dBm	5dB
LC-BA20/G12-B	BidiBooster, Max.Output 20dBm, Gain 12dB, With OSC, Amplify the blue signal (1528~1543)	12dB	20dBm	-10dBm	8dBm	5dB
LC-BA20/G12NS-B	BidiBooster, Max.Output 20dBm, Gain 12dB, Without OSC, Amplify the blue signal (1528~1543)	12dB	20dBm	-10dBm	8dBm	5dB
Bidi Booster: Amplify the red signal (1547~1561nm)						
LC-BA16/G12-R	BidiBooster, Max.Output 16dBm, Gain 12dB, WithOSC, Amplify the red signal (1547~1561nm)	12dB	16dBm	-10dBm	4dBm	5dB
LC-BA16/G12NS-R	BidiBooster, Max.Output 16dBm, Gain 12dB,Without OSC, Amplify the red signal (1547~1561nm)	12dB	16dBm	-10dBm	4dBm	5dB
LC-BA20/G12-R	BidiBooster, Max.Output 20dBm, Gain 12dB, WithOSC, Amplify the red signal (1547~1561nm)	12dB	20dBm	-10dBm	8dBm	5dB
LC-BA20/G12NS-R	BidiBooster, Max.Output 20dBm, Gain 12dB,Without OSC, Amplify the red signal (1547~1561nm)	12dB	20dBm	-10dBm	8dBm	5dB
Bidi-Pre-Amplifier: Amplify the blue signal (1528~1543)						
LC-PA16/G20-B	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 20dB,With OSC, Amplify the blue signal (1528~1543)	20dB	16dBm	-29dBm	-4dBm	4.5dB
LC-PA16/G20NS-B	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 20dB, Without OSC, Amplify the blue signal (1528~1543)	20dB	16dBm	-29dBm	-4dBm	4.5dB
LC-PA16/G25-B	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 25dB,With OSC, Amplify the blue signal (1528~1543)	25dB	16dBm	-29dBm	-9dBm	4.5dB
LC-PA16/G25NS-B	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 25dB, Without OSC, Amplify the blue signal (1528~1543)	25dB	16dBm	-29dBm	-9dBm	4.5dB
Bidi-Pre-Amplifier: Amplify the red signal (1547~1561nm)						
LC-PA16/G20-R	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 20dB,With OSC, Amplify the red signal (1547~1561nm)	20dB	16dBm	-29dBm	-4dBm	5dB
LC-PA16/G20NS-R	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 20dB, Without OSC, Amplify the red signal (1547~1561nm)	20dB	16dBm	-29dBm	-4dBm	5dB
LC-PA16/G25-R	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 25dB,With OSC, Amplify the red signal (1547~1561nm)	25dB	16dBm	-29dBm	-9dBm	5dB
LC-PA16/G25NS-R	Bidi-Pre-Amplifier, Max.Output 16dBm, Gain 25dB, Without OSC, Amplify the red signal (1547~1561nm)	25dB	16dBm	-29dBm	-14dBm	5dB
Bidi-Line-Amp: Amplify the blue signal (1528~1543)						
LC-LA16/G20-B	Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, With OSC, Amplify the blue signal (1528~1543nm)	20dB	16dBm	-29dBm	-4dBm	5dB
LC-LA16/G20NS-B	Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, Without OSC, Amplify the blue signal (1528~1543nm)	20dB	16dBm	-29dBm	-4dBm	5dB

LC-LA16/G20-8-B	Midstage access Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, With OSC, Mid-access Gain 8dB, Amplify the blue signal (1528~1543nm)	20dB	16dBm	-29dBm	-4dBm	6dB
LC-LA16/G20NS-8-B	Midstage access Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, Without OSC, Mid-access Gain 8dB, Amplify the blue signal (1528~1543nm)	20dB	16dBm	-29dBm	-4dBm	6dB
LC-LA20/G20-B	Bidi-Line-Amp, Max.Output 20dBm, Gain 20dB, With OSC, Amplify the blue signal (1528~1543nm)	20dB	20dBm	-29dBm	0dBm	5dB
LC-LA20/G20NS-B	Bidi-Line-Amp, Max.Output 20dBm, Gain 20dB, Without OSC, Amplify the blue signal (1528~1543nm)	20dB	20dBm	-29dBm	0dBm	5dB
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LC-LA16/G25-B	Bidi-Line-Amp, Max.Output 16dBm, Gain 25dB, With OSC, Pass 1528~1543 (Blue), Reflection 1547~1561nm (Red)	25dB	16dBm	-29dBm	-9dBm	5dB
LC-LA16/G25NS-B	Bidi-Line-Amp, Max.Output 16dBm, Gain 25dB, Without OSC, Amplify the blue signal (1528~1543nm)	25dB	16dBm	-29dBm	-9dBm	5dB
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Bidi-Line-Amp: Amplify the red signal (1547~1561nm)						
LC-LA16/G20-R	Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, With OSC Amplify the red signal (1547~1561nm)	20dB	16dBm	-29dBm	-4dBm	5dB
LC-LA16/G20NS-R	Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, Without OSC Amplify the red signal (1547~1561nm)	20dB	16dBm	-29dBm	-4dBm	5dB
LC-LA16/G20-8-R	Midstage access Bidi-Line-Amp, Max.Output 16dBm, Gain 20dB, With OSC, Mid-access Gain 8dB Amplify the red signal (1547~1561nm)	20dB	16dBm	-29dBm	-4dBm	6dB
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