LASER LINK®

MODULAR 1550 nm ERBIUM DOPED FIBER AMPLIFIER

APPLICATION

Amplifies 1550 nm optical signals to increase the optical transmission reach of the system. This product offering is flexible enough to perform in numerous upstream and downstream applications, including DWDM architectures, supertrunk transmission, hub interconnects and 1310/1550 nm overlays.

BENEFITS

- Provides high performance
- Allows for simple optimization and configuration
- Allows for high density deployment
- Provides interface for remote monitoring
- Reduces capital and operating expenses
- Adapts to numerous system architectures
- Drives optical signal further into the network

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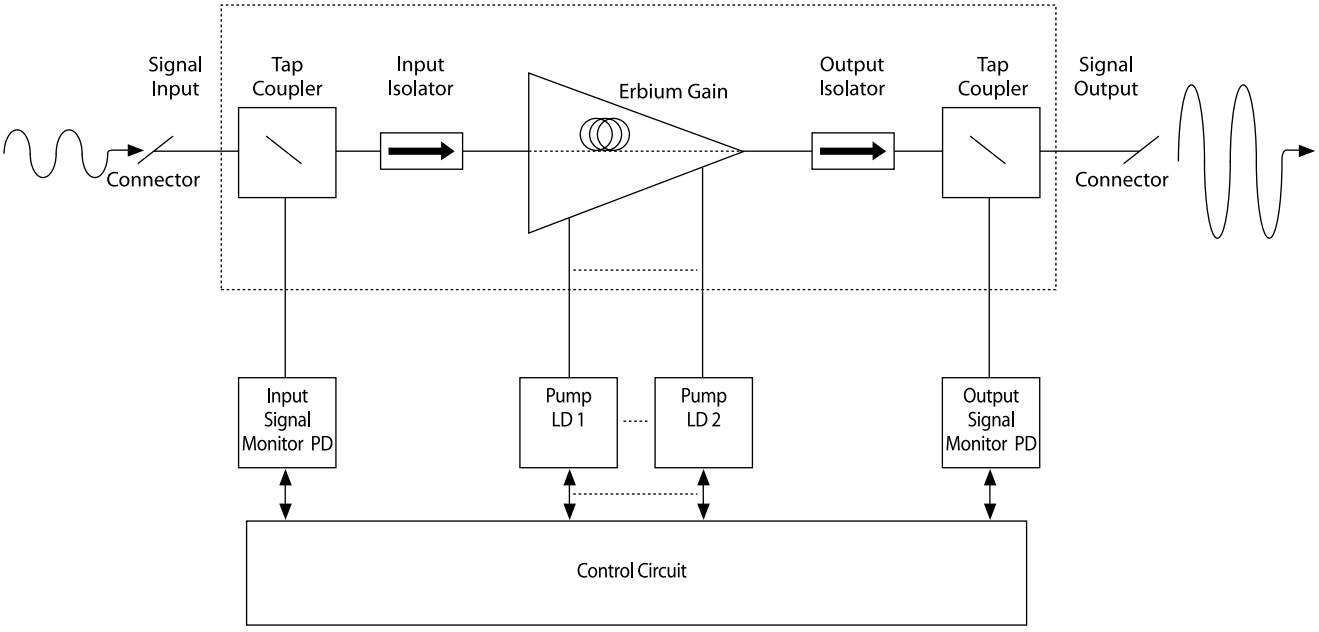
FEATURES

- Low noise figure
- Front panel LCD and LED display
- User adjustable optical output power
- Network Management (status monitoring) ready
- Highly reliable, rugged design
- Saturated, gain-locked, power-locked modes of operation
- Numerous optical output power options
- Multiple primary and redundant powering configurations
- Housed in a full-width Laser Link module

BLOCK DIAGRAM



SPECIFICATIONS

Model #	LLOA-C-14BM	LLOA-C-17BM	LLOA-C-20BM	LLOA-C-22BM	LLOA-C-20BM-G7F
Noise Figure (Max.) (dB)	5.0	5.0	5.3	5.3	5.3
Wavelength (nm)			1528-1562		
Polarization Dependent Gain (Max.) (dB)			±0.2		
Optical Return Loss (dB)			50		
Optical Input Power[1] (dBm)					
Saturation Mode	0-10	0-10	0-10	0-10	n/a
Power Lock	0-10	0-10	0-10	0-10	n/a
Gain lock	-10 to 3	-10 to 3	-10 to 3	-10 to 3	-7 to 3
Minimum Output Power[2] (dBm)					
Saturation Mode	14	17	20	22	n/a
Power Lock	14	17	20	22	n/a
Gain lock	4	7	10	12	10
Gain[3] (dB)					
Saturation Mode	n/a	n/a	n/a	n/a	n/a
Power Lock	n/a	n/a	n/a	n/a	n/a
Gain lock	11-14	14-17	17-20	19-22	16.5-17.5
Static Gain Flatness[4] (dB) (Max.)					
Saturation Mode	2.0	2.0	2.0	2.0	2.0
Power Lock	3.0	3.0	3.0	3.0	3.0
Gain lock	n/a	n/a	n/a	n/a	n/a
Dynamic Gain Flatness[5] (dB)					
1528-1562	5	6	8	n/a	1
1542-1562	2	4	6	n/a	1
1549-1562	1.5	3.5	5.5	n/a	1

Power					
Power Consumption (Max.) (W)	17	17	35	43	43
DC Input (V dc)			24		

Physical	
Operating Temperature °F (°C)	-4 to 149 (-20 to 65)
Relative Humidity (Non condensing)	<95%
Optical Connector	SC/APC, E2000
Dimensions (H x W x D) in. (cm)	5.3 x 2.2 x 13.5 (13.3 x 5.6 x 34.3)
Weight lbs. (kg)	1.75 (0.79)

Note 1: Operating input range in Gain Lock mode is selectable in ranges, 3 to -7 dBm, 2 to -8 dBm, 1 to -9 dBm or 0 to -10 dBm; refer to Gain Lock mode discussion in Equipment Description

Note 2: Minimum output power in Gain Lock mode varies according to the selected gain

Note 3: Gain in saturation and Power Lock modes varies according to operating input power

Note 4: Static Gain Flatness in Saturation and Power Lock modes is for 0<P in <10 dBm

Note 5: Dynamic Gain Flatness in Gain Lock mode only

Specifications are subject to change without notice.

ORDERING INFORMATION

Description	Part #
Optical Amplifier, Modular, LLOA-C-14BM, Input Isolator, SC/APC	253704
Optical Amplifier, Modular, LLOA-C-14BM, Input Isolator, E2000	253705
Optical Amplifier, Modular, LLOA-C-17BM, Input Isolator, SC/APC	253706
Optical Amplifier, Modular, LLOA-C-17BM, Input Isolator, E2000	253707
Optical Amplifier, Modular, LLOA-C-20BM, Input Isolator, SC/APC	253708
Optical Amplifier, Modular, LLOA-C-20BM, Input Isolator, E2000	253709
Optical Amplifier, Modular, LLOA-C-20BM-GF, Input Isolator, Gain Flattened, SC/APC	253720
Optical Amplifier, Modular, LLOA-C-20BM-GF, Input Isolator, Gain Flattened, E2000	253721
Optical Amplifier, Modular, LLOA-C-22BM, Input Isolator, SC/APC	253710
Optical Amplifier, Modular, LLOA-C-22BM, Input Isolator, E2000	253711