

Benchtop Erbium-Doped Fiber Amplifier

EDFA Series



Key Features

- Choice of wavelengths C- or L- bands
- High output power and gain
- Mid-span access
- Compact benchtop design with rackmount kit
- Single channel and multichannel dense wavelength division multiplexing (DWDM) capabilities
- RS-232 remote control

Applications

- Pre-amp booster, in-line amplifier emulation
- Dense wavelength division multiplexing (DWDM) transmission, for multichannel applications
- SONET/SDH systems, for single channel applications

Safety Information

Complies to CE requirements plus UL3101-1 and CAN/CSA-C22.2 No. 1010.1 Meets the requirements of Class 3B in standard IEC 60825-1(2002) and complies with 21CFR1040.10 except deviations per Laser Notice No. 50, July 2001.

The Benchtop Erbium-Doped Fiber Amplifier (EDFA) amplifies optical signals across the EDFA window (1528 to 1610 nm). Through optimization of amplifier gain, noise figure, and saturated output power, the EDFA will expand your test capabilities in systems, components or sub-assembly manufacturing as well as research and development (R&D) environments.

The amplifier incorporates a unique design to produce maximum signal gain and saturated output power in the 1550 and 1590 nm test bands while minimizing noise figure. It features a user-friendly front panel housing an LCD displaying input/output power, current control and an optical interface.

The amplifier is offered in C-band, L-band and C+L-band versions and pre-amplifier, booster, or in-line amplifier configurations.

The Benchtop models provide specialized variants and optical performance not available in the Multiple Application Platform (MAP) line. Additional EDFA models are available in the MAP EDFA product line.

INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT
(IEC 60825-1, 2002)
MAX. 500 mw, 700-1680 nm

2

Specifications

MODEL	OAB1552	OAB1592	OAB1596	OAB1598	OAB1562	OAB1564
Test band	C-band	L-band	L-band	L-band	C+L-band	C+L-band
Amplifier type	Booster high power	Booster high power	Mid-span access DWDM	Booster DWDM	Booster	In-line
Operating wavelength range	1528 to 1563 nm	1565 to 1610 nm	1570 to 1603 nm	1570 to 1603 nm	1530 to 1560 nm 1570 to 1600 nm	
Input signal	Single channel		Multichannel DWDM		Single Channel	
Saturated output power ¹	≥24 dBm	≥22 dBm	≥20 dBm	≥20 dBm	≥19 dBm	≥14 dBm
Noise figure ²	≤5.0 dB	≤5.5 dB	≤5.8 dB	≤5.5 dB	≤6.5 dB	≤6.5 dB
Small signal gain ³	≥36 dB	≥29 dB	≥22 dB	≥20 dB	≥22 dB	≥20 dB
	(MS loss ≤ 7 dB)					
Spectral gain flatness ⁴	N/A	N/A	1.7 dB	1.7 dB	N/A	N/A
Polarization dependent loss (PDL)	≤0.2 dB	≤0.3 dB	≤0.3 dB	≤0.9 dB	≤0.4 dB	≤0.4 dB
Polarization mode dispersion (PMD)	≤0.45 ps	≤0.8 ps	≤0.9 ps	≤0.9 ps	≤0.7 ps	≤0.7 ps
Input/output isolation	45/32 dB	40/40 dB	40/40 dB	40/40 dB	40/40 dB	40/40 dB
Input/output monitors	Yes					
Input voltage	100 to 240 V AC, 50 to 60 Hz					
Power consumption	90 V A Maximum					
Packaging	Half-rack benchtop and 19-inch rackmount kit					
Operating temperature	0 to 50 °C					
Storage temperature	- 40 to 70 °C					
Humidity	Maximum 95 % RH non-condensing from 0 to 45 °C					
Dimensions (W x H x D)	21.2 x 8.9 x 35.5 cm					
Weight	> 4 kg					

1. Saturated Output Power measured:

- At 1550 nm at Pin = - 4 dBm for model 1552
- At 1590 nm at Pin = 0 dBm for model 1592 and 1598
- At 1590 nm at Pin = - 2 dBm for model 1596
- At 1550 nm at Pin = - 4 dBm and at 1590 nm and Pin - 0 dBm for model 1562 and 1564

2. Noise figure measured:

- At Pin = - 4 dBm for model 1552 and 1592
- At Pin = - 4 dBm for model 1596
- At Pin = 0 dBm for model 1598
- At Pin = - 20 dBm for model 1562 and 1564

3. Small signal gain measured:

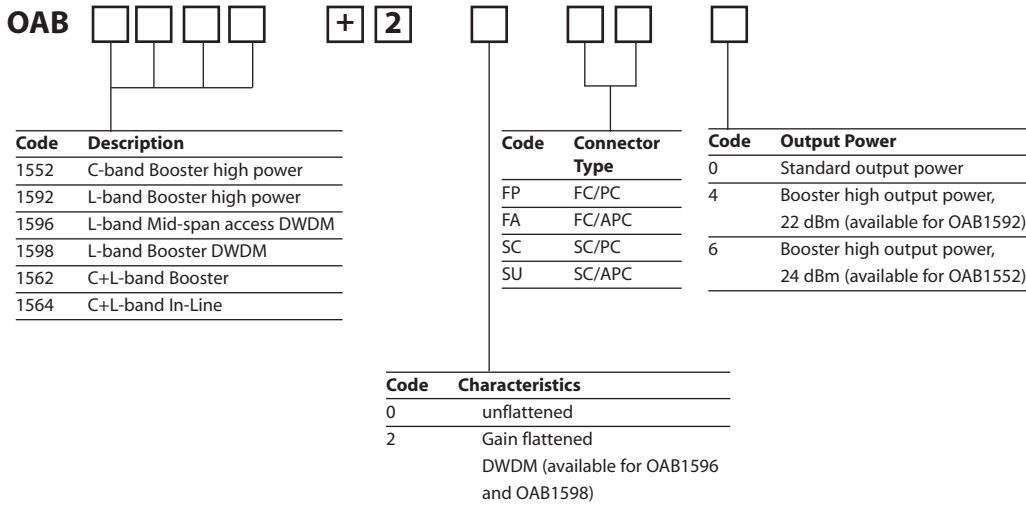
- At Pin = -20 dBm for model 1552, 1562, 1564, and 1592
- At Pin = -2 dBm for model 1596
- At Pin = 0 dBm for model 1598

4. Flatness optimized for:

- At Pin = -2 dBm (1570-1603 nm)
- At Pin = 0 dBm (1570-1603 nm)

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at sales@jdsu.com.

Sample: OAB1552+20FP0

Standard Accessories

Part Number	Description
ED000899-A-00	Standard 19-inch rackmount kit

Optional Accessories

Part Number	Description
ED000899-A-01	Rackmount kit (Japan)

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. JDSU reserves the right to change at any time without notice the design, specifications, function, fit or form of its products described herein, including withdrawal at any time of a product offered for sale herein. JDSU makes no representations that the products herein are free from any intellectual property claims of others. Please contact JDSU for more information. JDSU and the JDSU logo are trademarks of JDS Uniphase Corporation. Other trademarks are the property of their respective holders. ©2006 JDS Uniphase Corporation. All rights reserved. 10109630 Rev. 007 10/06

Test & Measurement Regional Sales

NORTH AMERICA TOLL FREE: 1 866 228 3762 FAX: +1 301 353 9216	LATIN AMERICA TEL: +55 11 5503 3800 FAX: +55 11 5505 1598	ASIA PACIFIC TEL: +852 2892 0990 FAX: +852 2892 0770	EMEA TEL: +49 7121 86 2222 FAX: +49 7121 86 1222	WEBSITE: www.jdsu.com
---	--	---	---	------------------------------