

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

MAP Erbium-Doped Fiber Amplifier
(mEDFA-A1)



Key Features

- Pre-amp, booster and in-line configurations
- High output power and gain maximize operating range
- Low noise figure minimizes optical impairment
- Monitoring and alarms available
- Can be automated when used with MAP-200 LXI-compliant interfaces and IVI drivers

Applications

- In-line, pre-amp and booster amplifier emulation
- Dense wavelength division multiplexing (DWDM) transmission for multi-channel applications
- SONET/SDH systems for single channel applications
- Optical signal-to-noise ratio (OSNR) experiments

The Multiple Application Platform (MAP) Erbium-Doped Fiber Amplifier (mEDFA-A1) is optimized for the industry-leading MAP-200 platform from JDSU. Based on the previous-generation MAP, the MAP-200 is the first photonic layer lab and manufacturing platform that is LAN Extensions for Instrumention (LXI)-compliant by conforming to the required physical attributes, Ethernet connectivity, and interchangeable virtual instrument (IVI) drivers. The MAP-200 platform is optimized for density and maximum configurability to meet specific application requirements in the smallest possible foot print. The MAP EDFA has a saturated output power ranging from 14 dBm to 21 dBm, features noise figures as low as 3.7 dB and has gain flatness better than 2.0 dB. All MAP EDFA models are available for operation in C- or L-band.

Safety Information

- The MAP EDFA, when installed in a MAP chassis, complies to CE, CSA/UL/IEC61010-1, LXI Class C requirements, meets the requirements of Class 3B in standard IEC 60825-1 (2002), and complies with 21 CFR 1040.1 except deviations per Laser Notice No. 50, July 2001.

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

2

Specifications

Parameter	1550	1552	1552	1554	1558	1590	1592	1594
Amplifier type	Pre-amp	Booster	Booster high power	In-line	Booster DWDM	Pre-amp	Booster	In-line
Operating wavelength range	1528 to 1565 nm	1528 to 1565 nm	1528 to 1565 nm	1528 to 1565 nm	1528 to 1563 nm	1565 to 1610 nm	1565 to 1610 nm	1565 to 1610 nm
Input signal	Single channel	Single channel	Single channel	Single channel	Multichannel (DWDM)	Single channel	Single channel	Single channel
Saturated output power (minimum)[1]	>14 dBm	>17 dBm	>20 dBm	>17 dBm	>21 dBm	>15 dBm	>15 dBm	>20 dBm
Noise figure (maximum)[2]	<3.7 dB	<4.5 dB	<5.0 dB	<4.1 dB	<5.5 dB	<5.2 dB	<5.5 dB	<5.5 dB
Small signal gain (minimum)[3]	>37 dB	>30 dB	>32 dB	>35 dB	>25 dB	>24 dB	>22 dB	>28 dB
Input/output monitors	No	Yes	Yes	No	Yes	No	Yes	Yes
Polarization dependent loss (PDL) (maximum)	<0.2 dB	<0.2 dB	<0.2 dB	<0.2 dB	<0.25 dB	<0.3 dB	<0.3 dB	<0.3 dB
Polarization mode dispersion (PMD) (maximum)	<0.5 ps	<0.4 ps	<0.4 ps	<0.5 ps	<0.65 ps	<0.6 ps	<0.6 ps	<0.6 ps
Input/output isolation (typical)	N/A/32 dB	45/32 dB	45/32 dB	32/32 dB	32/32 dB	N/A/40 dB	40/40 dB	40/40 dB
Spectral gain flatness (maximum) (p-p)[4]	N/A	N/A	N/A	N/A	<2.0 dB	N/A	N/A	N/A
Operating temperature	0 to 40°C							
Storage temperature	–30 to 60°C							
Humidity	Maximum 95% RH non-condensing from 0 to 45°C							
Dimensions (W x H x D)	4.06 x 13.26 x 37.03 cm (1.6 x 5.22 x 14.58 in)							
Weight	1.3 kg (2.87 lb)							

Note: All specifications guaranteed at 1550 nm and at 23°C

1. Saturated Output Power measured:
   at 1550 nm at P_{in} = –4 dBm
   at 1550 nm at P_{in} = –4 dBm (mid-span) for models 1550, 1552, 1554, 1558
   at 1590 nm at P_{in} = 0 dBm (mid-span) for models 1590, 1592, 1594
2. Noise figure measured:
   at P_{in} = –30 dBm for model 1550
   at P_{in} = –4 dBm for models 1552, 1558, 1592
   at P_{in} = –20 dBm for models 1554, 1590, 1594
3. Small signal gain measured:
   at P_{in} = –30 dBm for model 1550
   at P_{in} = –20 dBm for model 1552, 1554, 1590, 1592, 1594
   at P_{in} = –4 dBm for model 1558
4. Flatness optimized:
   for P_{in} = –4 dBm for model 1558

Note: 1558 Input Power Monitor: Min Power displayed typical - 18 dBm and Max Power displayed typical +3 dBm

3

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 customer.service@jdsu.com.

Product Code	Description
Base Options (Required, select one)	
MEDFA-A15500	14 dBm C-band, Single Channel, Pre-amp
MEDFA-A15520	17 dBm C-band, Single Channel, Booster
MEDFA-A15522	20 dBm C-band, Single Channel, Booster
MEDFA-A15540	17 dBm C-band, Single Channel, In-Line Booster
MEDFA-A15580	21 dBm C-band, DWDM, Booster
MEDFA-A15900	15 dBm L-band, Single Channel, Pre-amp
MEDFA-A15920	15 dBm L-band, Single Channel, Booster
MEDFA-A15940	20 dBm L-band, Single Channel, In-Line Booster
Connector Options (Required, select one)	
MFP	FC/PC connector type
MFA	FC/APC connector type

UL is a registered trademark of Underwriters Laboratories, inc.

Test & Measurement Regional Sales

NORTH AMERICA
TEL: 1 866 228 3762
FAX: +1 301 353 9216

LATIN AMERICA
TEL: +1 954 688 5660
FAX: +1 954 345 4668

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/test

Product specifications and descriptions in this document subject to change without notice. © 2011 JDS Uniphase Corporation February 2011 30149430 003 0211 MAPLED.DS.LAB.TM.AE

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP