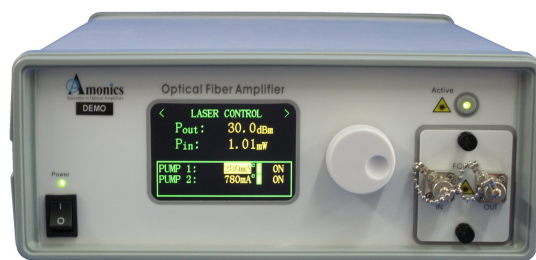


## Applications

- SONET/SDH Systems
- Optical Communication
- Pre-amp, Booster & In-line emulation
- CATV
- Laboratory



## Description

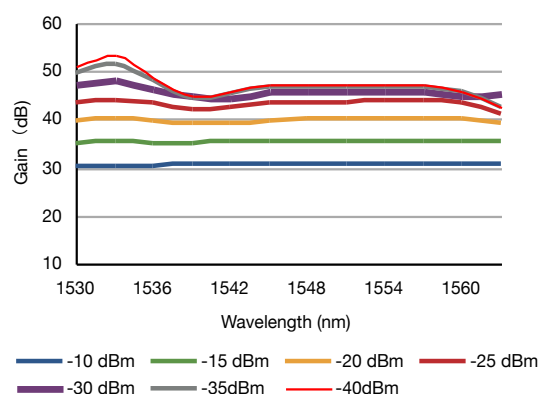
Amonics' EDFA range adopts unique design to produce maximum signal gain and saturated output power while maintaining low noise figure, enabling test capabilities in system or component level manufacturing and characterizing processes, as well as facilitating highly demanding R&D applications.

The compact turnkey benchtop or 19" rackmount unit incorporates a user-friendly front panel housing with a LCD monitor display, key switch, power control knob and optical connectors. An integrated RS232 computer interface enables easy control, diagnostic functions and data acquisition.

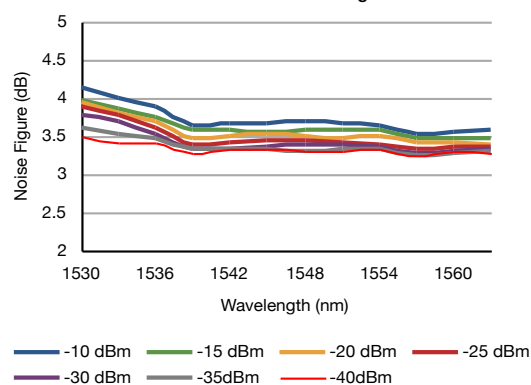
## Key Features

- Turnkey device
- RS232/Ethernet computer interface
- High output power
- High gain
- Low noise figure
- Long operating life

AEDFA-PA-35-B-FA Gain



AEDFA-PA-35-B-FA Noise Figure



### Pre-amp Specifications

| AEDFA-PA-30                  | AEDFA-PA-35            | General Parameters                                                                                                                                                                                                                                                     |
|------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Signal Level           | -40 to -10dBm          | Operation Temperature : 0 to 40 °C<br>Storage Temperature: -10 to 70 °C<br>Power Supply (VAC): 90 – 240, 47 – 63Hz<br>Dimensions(mm): Benchtop: 260(W) x 330(D) x 120(H)<br>1U Rackmount: 485(W) x 360(D) x 45(H)<br>Other standard rackmount sizes are also available |
| Optical Gain @ -40dBm        | >30dB                  | Safety Control: Key-lock switch, BNC interlock key                                                                                                                                                                                                                     |
| Optical Gain @ -10dBm        | >20dB                  | Power Monitoring: Output power, Input power (optional)                                                                                                                                                                                                                 |
| Noise Figure @ -20dBm        | < 4.3dB                | Remote Control Port: DB-9 female (RS232)<br>RJ-45 (TCPIP/Ethernet) (optional)                                                                                                                                                                                          |
| Operation Wavelength         | 1530nm to 1563nm       | Protection: Pump laser (TEC) overheat                                                                                                                                                                                                                                  |
| Input / Output Isolation     | > 30dB                 | Optical Fiber: SMF-28                                                                                                                                                                                                                                                  |
| Polarization Dependent Gain  | Typ. 0.3dB, Max. 0.5dB |                                                                                                                                                                                                                                                                        |
| Polarization Mode Dispersion | < 0.3ps                |                                                                                                                                                                                                                                                                        |

### Booster Specifications

| AEDFA-BO-13                                 | AEDFA-BO-18            | AEDFA-BO-23 |
|---------------------------------------------|------------------------|-------------|
| Input Signal Level                          | -6 to +3dBm            |             |
| Saturated Output Power @ -3dBm input Signal | > +13dBm               | > +18dBm    |
| Noise Figure@-3dBm Input Signal             | < 5.0dB                | < 5.5dB     |
| Optical Gain@-6dBm Input Signal             | > 19dB                 | > 24dB      |
| Operation Wavelength                        | 1530 nm to 1563nm      | > 29dB      |
| Input / Output Isolation                    | > 30dB                 |             |
| Polarization Dependent Gain                 | Typ. 0.3dB, Max. 0.5dB |             |
| Polarization Mode Dispersion                | < 0.3ps                |             |

### In-line Specifications

| AEDFA-IL-13                                 | AEDFA-IL-18            | AEDFA-IL-23 |
|---------------------------------------------|------------------------|-------------|
| Input Signal Level                          | -25 to -3dBm           |             |
| Saturated Output Power @ -3dBm input Signal | > +13dBm               | > +18dBm    |
| Noise Figure@-20dBm Input Signal            | < 5.0dB                | < 5.5dB     |
| Optical Gain@-25dBm Input Signal            | > 25dB                 | > 30dB      |
| Operation Wavelength                        | 1530nm to 1563nm       | > 35dB      |
| Input / Output Isolation                    | > 30dB                 |             |
| Polarization Dependent Gain                 | Typ. 0.3dB, Max. 0.5dB |             |
| Polarization Mode Dispersion                | < 0.3ps                |             |

### Ordering Information

|              |                  |                                                                                                                                                                                                                    |
|--------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Code | AEDFA-aa-bb-c-dd | aa: PA for Pre-amp, BO for Booster, IL for In-line<br>bb: Saturated output power in dBm<br>c: B for Benchtop case, R for 1U 19" Rackmount case<br>dd: FA for FC/APC, FC for FC/UPC<br>SA for SC/APC, SC for SC/UPC |
|--------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Amonics undertakes continuous and intensive product development to ensure its product performance at the highest technical standards. As a result, the specifications in this document are subject to change without notice.

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