



ISO 9001 : 2008
Certificate No.: CC 5346



Applications

- SONET/SDH Systems
- LAN and MANs
- Fiber Optic Sensing
- CATV Networks
- Laboratory

Description

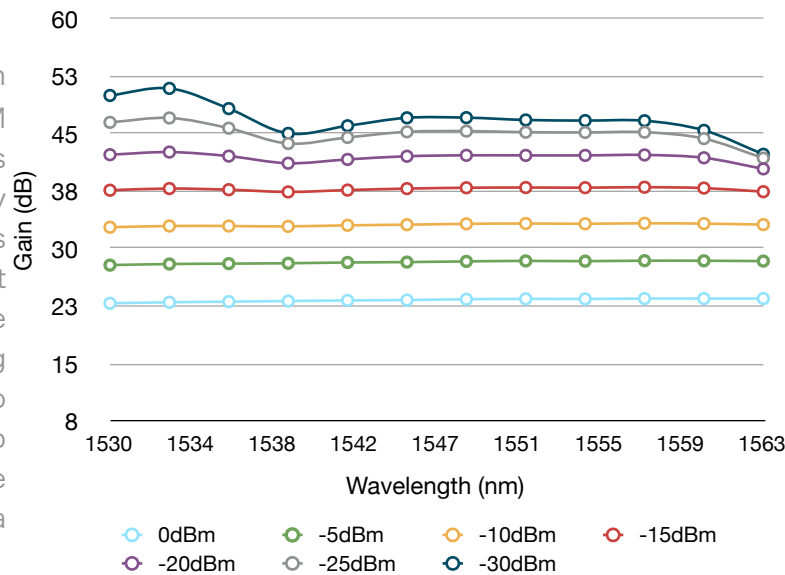
Amonics EDFA module version is an ideal building block for OEM system integrators as it performs all the functions of an EDFA ready for system integration. This includes photodetection of output signal and /or input signal. Three different control modes including ACC, APC and AGC are offered to meet different requirements. Pump laser protection and alarm are equipped as well. It requires only a single +5V power supply.

OEM Module Erbium Doped Amplifier (EDFA)

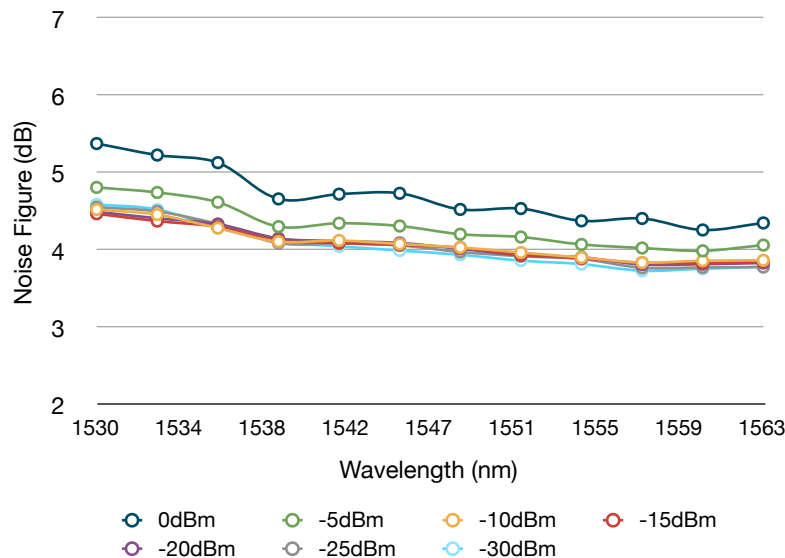
Key Features

- Small foot print
- High output power
- High gain
- Wide operation range
- Single +5V power supply
- Two year warranty

AEDFA-23-M-FA Gain Curve



AEDFA-23-M-FA Noise Figure Curve



OEM EDFA Module Specifications

	AEDFA -13	AEDFA -18	AEDFA -23
Saturation Output Power (at -3dBm input signal)	> +13dBm	> +18dBm	> +23dBm
Small Signal gain at 1550nm (at -30dBm input signal)	> 30dB	> 32dB	> 37dB
Noise Figure (typ.) (at -3dBm input signal)	5.0dB	5.5dB	6.0dB
Operating Wavelength	1528nm – 1563nm		
Input Isolation	> 30dB		
Output Isolation	> 30dB		
Polarization Dependent Gain	< 0.3dB		
Control Mode	ACC (standard), APC & AGC		

* Other output power models are available upon request

General Environmental Parameters

Parameter	Unit	Specification
Operation Temperature Range	°C	-5 to +60
Storage Temperature Range	°C	-10 to +70
Power Supply	VDC	5.0
Dimensions	mm	100(W) x 120(L) x 18(H) for AEDFA -13 120(W) x 200(L) x 25(H) for AEDFA -18 156(W) x 210(L) x 32(H) for AEDFA -23
Monitoring	-	Optical output power, pump laser temperature
Alarm	-	Pump laser temperature
Electrical	-	14-pin MIL Socket for AEDFA -13 DB25 Connector for AEDFA -18, AEDFA -23
Protection	-	Pump laser over heat warning
Optical Connector	-	FC/APC, FC/UPC, SC/APC, SC/UPC
Optical Fiber	-	Min. 0.5m long SMF-28

Option:

- Gain Flattening Filtering
- APC or AGC Control Mode
- Input Power Monitoring

**Ordering Information**

Product Code	AEDFA-xx-y-zz	xx: Saturation Output Power in dBm y: M for module type zz: FA for FC/APC, FC for FC/UPC SA for SC/APC, SC for SC/UPC
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Amonics undertakes a continuous and intensive product development to ensure its products perform to highest technical standards. As a result, the specifications in this document are subject to change without notice.

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Pre-amp Module Specifications

	AEDFA-PA-30	AEDFA-PA-35
Input Signal Level	-40 to -10dBm	
Optical Gain @ -40dBm	> 30dB	> 35dB
Noise Figure @ -20dBm	< 4.5dB	
Operation Wavelength	1528nm to 1563nm	
Input/Output Isolation	> 30dB	
Polarization Dependent Gain	< 0.3dB	
Polarization Mode Dispersion	< 0.3ps	

Booster Module Specifications

	AEDFA-BO-13	AEDFA-BO-18	AEDFA-BO-23
Input Signal Level	-10 to +3dBm		
Saturated Output Power @ -3dBm input signal	> +13dBm	> +18dBm	> +23dBm
Noise Figure @ -3dBm Input Signal	< 5.5dB	< 5.5dB	< 6.0dB
Operation Wavelength	1528nm to 1563nm		
Input/Output Isolation	> 30dB		
Polarization Dependent Gain	< 0.3dB		
Polarization Mode Dispersion	< 0.3dB		

General Environmental Parameters

Parameter	Unit	Specification
Operation Temperature Range	°C	-5 to +60
Storage Temperature Range	°C	-10 to +70
Power Supply	VDC	5.0
Dimensions	mm	70(W) x 100(L) x 14(H) for AEDFA-BO-13 120(W) x 200(L) x 25(H) for AEDFA-BO-18, AEDFA-PA-30
Monitoring	-	Optical output power, pump laser temperature
Alarm	-	Pump laser temperature
Electrical Connector	-	14-pin MIL Socket for AEDFA-BO-13 DB25 Connector for AEDFA-BO-18, AEDFA-PA-30
Protection	-	Pump laser over heat warning
Optical Connector	-	FC/APC, FC/UPC, SC/APC, SC/UPC
Optical Fiber	-	Min. 0.5m long SMF-28

**Ordering Information**

Product Code	AEDFA-aa-bb-c-dd	aa: PA for Pre-amp, BO for Booster bb: Saturated Output Power in dBm for booster, small signal gain for pre-amp c: M for module type dd: FA for FC/APC, FC for FC/UPC, SA for SC/APC, SC for SC/UPC
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Amonics undertakes a continuous and intensive product development to ensure its products perform to highest technical standards. As a result, the specifications in this document are subject to change without notice.

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