



# Fibogain

## Features:

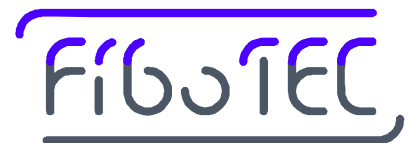
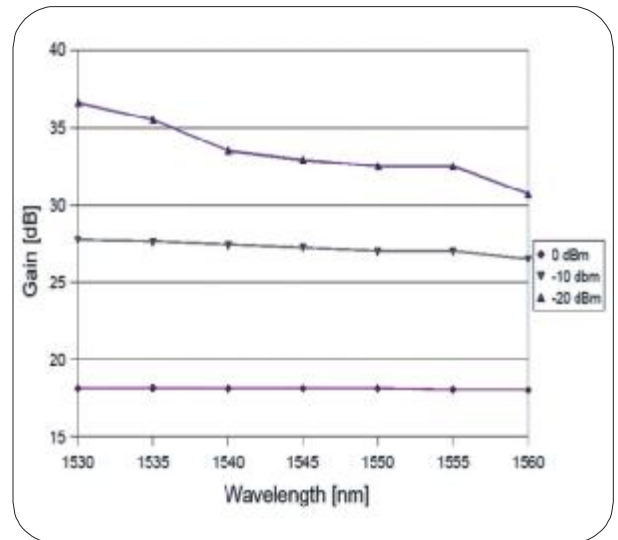
- instrument (controlled remotely)
- module and mini-size options
- customized versions available

## Erbium Doped Fiber Amplifier (EDFA)

EDFAs make use of the optical gain in an Erbium doped fiber that is pumped by either 980 nm or 1480 nm light sources. Thus incoming light of a longer wavelength in the C- or L-band is amplified and enhances the transmission span of fiberoptic links.

EDFAs typically operate in saturation and the average power of a signal determines the average gain. Bit to bit dynamics or inter-channel crosstalk in DWDM-systems do not change the dynamics of an EDFA. This also enables the amplification of channel-bundles within the entire emission wavelength range of Erbium superimposing simple single-channel links. The average output power in both cases is determined by the saturation power of the specific EDFA design however.

The majority of EDFAs is applied in fiberoptic links. Other applications can also be found - mainly in fiberoptic test & measurement setups and other instruments that include eyesafe freespace measurement installations.





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## Specifications: Erbium Doped Fiber Amplifier (EDFA)

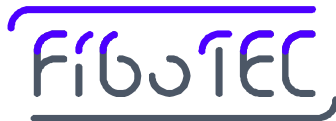
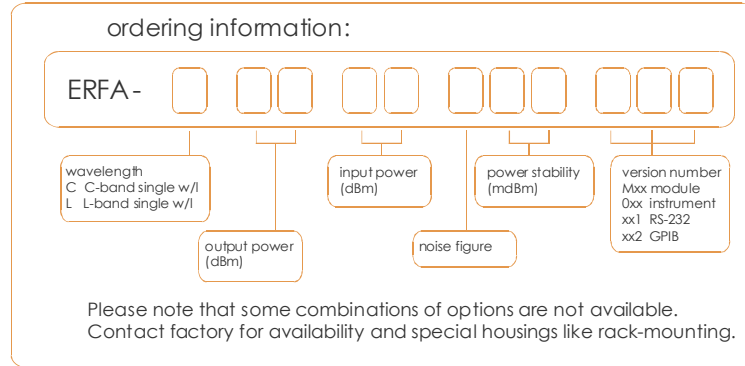
Parameter	ERFA-C 17 00 503 001	unit
wavelength range	1530-1565	nm
output power	min. 17 @ 0 dBm in	dbm
signal gain	min. 25 @ -10 dBm in	dB
noise figure	5-6	
polarization sensitivity	0.07	dB
isolation (input & output)	40	dB
return loss	-60	dB
loss of signal	< -25	dBm
pump leakage	< -15 (980 nm)	dBm

RS-232 In	RS-232 Out
ON	Op Mode
OFF	Power In
APC	Power Out
AGC	On/Off
ACC	OpCurrent
	LOS
	PumpErr
	TempEr
	OpHour

### Options:

- A: other module and instrument packages available (to be discussed)
- B: GPIB interface (on request)
- C: version with Yb-doped fiber (1060 nm - region)
- D: high-power versions (specifications to be discussed)
- E: L-band and other specifications to be discussed

Please indicate requirements by selecting options from the table or filling in desired values that still need to be confirmed by the manufacturer.



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### Specification:

- size: 145 x 100 x 17 cmm (module)  
210 x 290 x 95 cmm (instrument)
- weight: < 500 g (instrument < 4 kg)
- supply: 3 A max. @5V DC (module)  
< 40 W @100-240 V AC/50-60 Hz (instrument)
- working temperature: 0°C-40°C (non-condensing)
- storage temperature: -40°C-85°C
- complies with CE

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