

YDFA-45-R



DEVICE

High Power Ytterbium Doped Fiber Amplifier Up to +45dBm, Rackmount

OVERVIEW

The Optilab YDFA-45-R is a high-gain three staged single mode optical amplifier unit designed for applications requiring high efficiency optical amplification in the 1060 nm regime in both CW and pulse mode operations. It consists of three-stage amplifiers, delivering over 35 dB gain and up to +45 dBm saturation power at 1060 nm. It is a self-contained, turn-key rackmount designed with front panel touch screen to control high and stable gain across the specified range of the wavelength window.

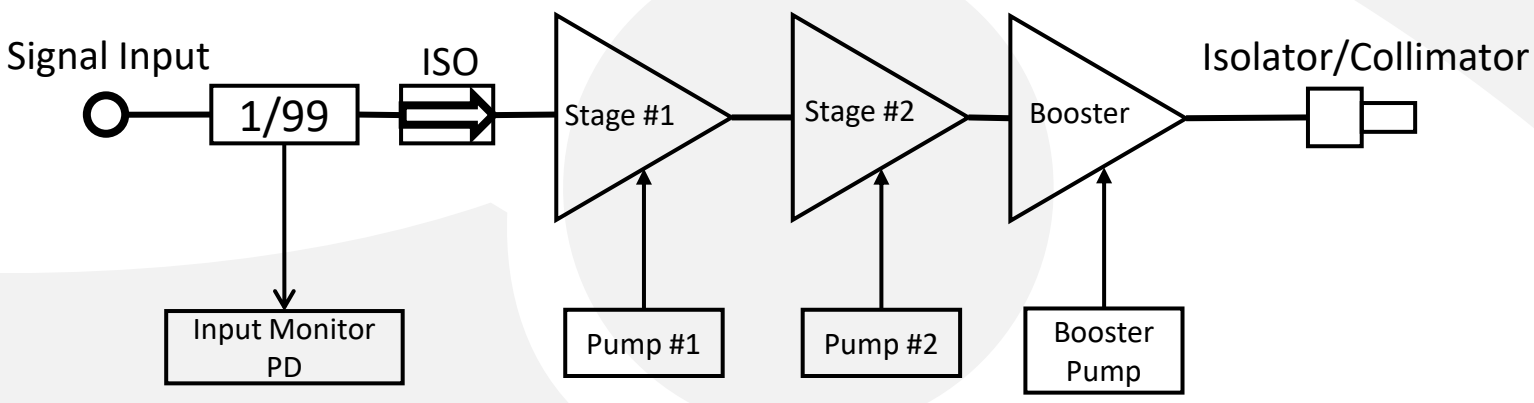
FEATURES

- Up to +45 dBm Saturation Power
- Collimated Output
- Interlock safety feature
- High SNR
- Automatic protection systems
- Gain up to 45 dB

USE IN

- SHG Application
- Medical Equipment
- Industrial lasers
- Materials processing
- Laboratory

FUNCTION DIAGRAM





YDFA-45-R

SPECIFICATIONS

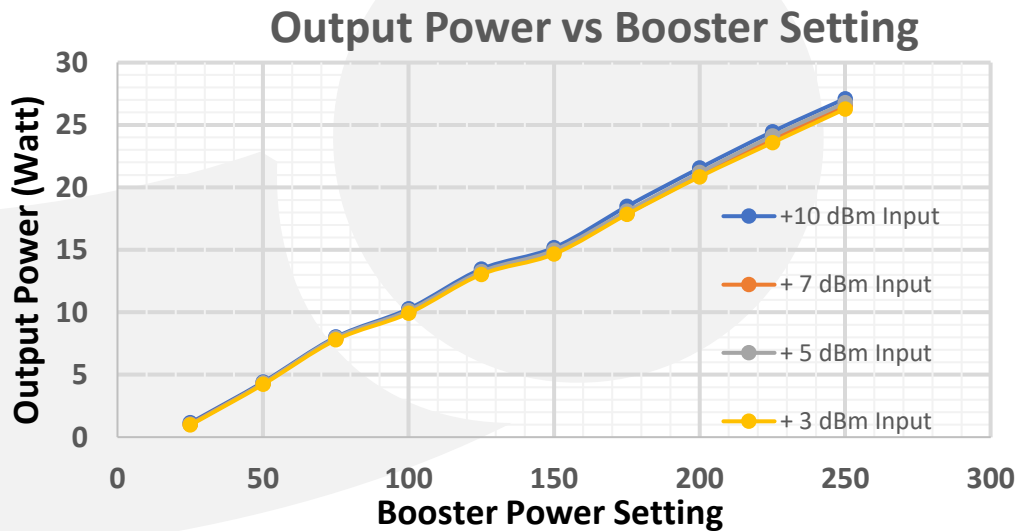
GENERAL

Wavelength Range	1040 nm to 1075 nm (Other Range Available upon Request)
Input Power Level	+3 dBm to +13 dBm
Input Laser Linewidth	> 200 kHz
Saturation Output Power	Up to +45 dBm
Optical Gain	45 dB @ -10 dBm input
Optical Return Loss	30 dB min.
Input / Output Optical Isolation	27 dB min.
Output Power Stability	0.2 dB over 8 hours
Optical Input fiber type	HI1060 High Power Connector or Collimator
Optical Output	Collimated output with 6 to 8 mm beam diameter

MECHANICAL

Operating Temperature	+5 °C to +40 °C
Storage Temperature	-10 °C to +70 °C
Power Supply	100 to 240 VAC, 50 to 60 Hz
Control	Pump laser current, enable switch
Monitoring	Pump laser current, input power
Remote control	RS232 via USB port
Dimensions	3U rackmount

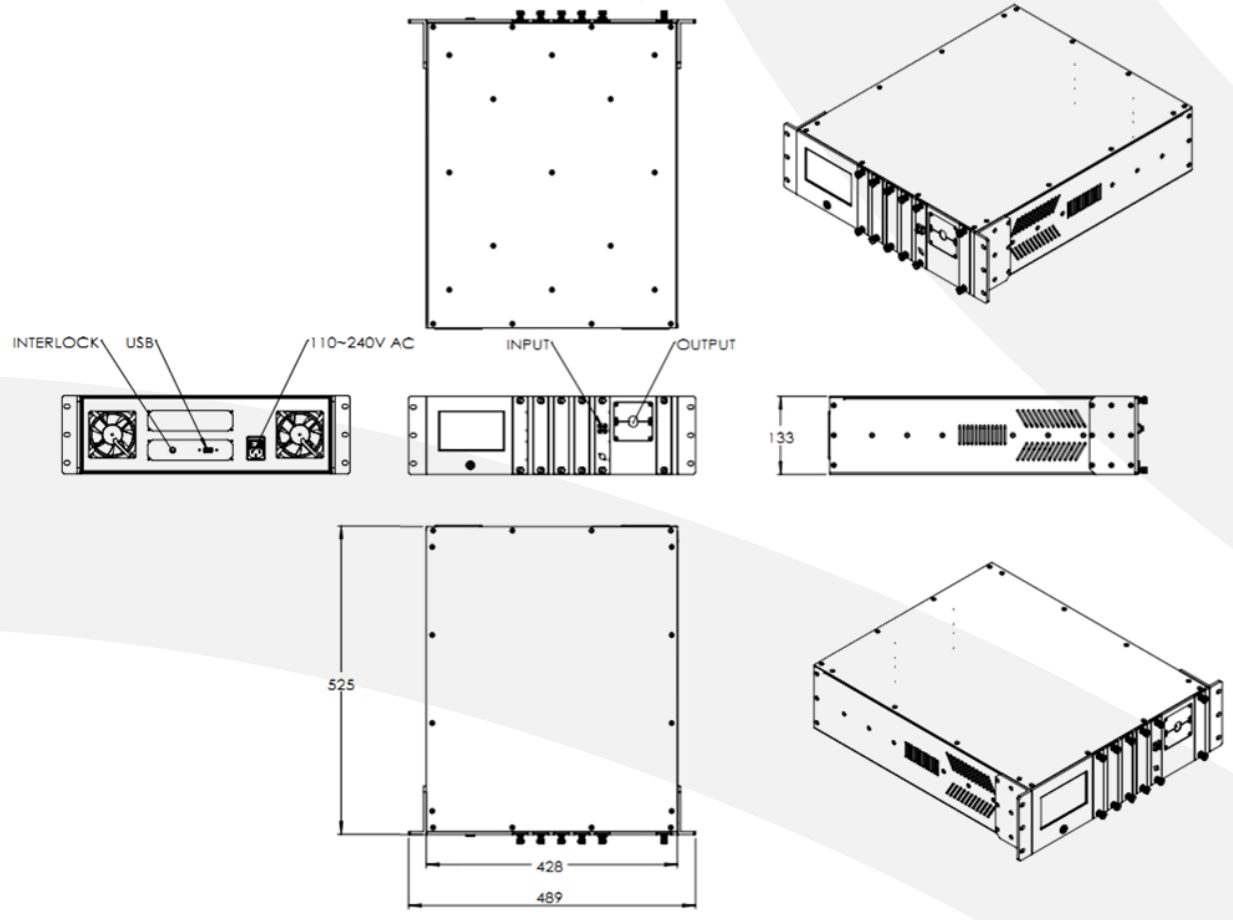
SAMPLE TEST DATA





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MECHANICAL
DRAWING



ORDERING OPTIONS

YDFA-XX-R

XX Output Power Level: 41, 43, 45 dBm

