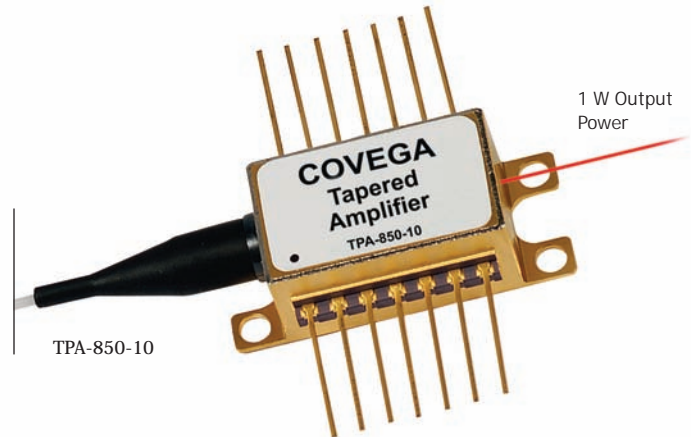


Tapered Amplifier

Thorlabs' Tapered Amplifiers consist of an amplifier integrated into a user-friendly, 14-pin butterfly package. Within this package, we have fiber coupled the amplifier's input facet to eliminate tedious alignment procedures that customers typically have to perform when working with a component-based tapered amplifier. In addition to eliminating alignment, the butterfly package encases the amplifier to protect it from contamination, leading to a prolonged lifetime. Our tapered amplifier design incorporates a collimating lens and a beam-shaping cylindrical lens to provide a circular, collimated output beam.

We currently offer an amplifier with a center wavelength of 850 nm and an output power of 1 W (seed dependent). Its PM fiber input simplifies the connection to a seed laser. A 780 nm center wavelength amplifier will be released soon and will be ideally suited for use with our TLK-L780M Tunable Laser Kit. Other center wavelengths, output powers, and input/output configurations will be released in the coming months. Please contact us for details regarding our latest developments and upcoming releases.

Due to the widespread use of 14-pin butterfly packages, users have a variety of mounting options, including our mount and driver that has been specifically designed for operating these tapered amplifiers (see reverse). All of these features make our tapered amplifiers an excellent choice over both chip- and system-level tapered amplifiers.



Features

- 850 nm Center Wavelength (780 nm Coming Soon!)
- 20 nm FWHM Gain Range
- 1 W Output Power
- 13 dB Gain
- 14-Pin Butterfly Package
- Circularized Output Beam

Specifications*

PARAMETER	MIN	TYP.	MAX
Center Wavelength	840 nm	850 nm	860 nm
FWHM Bandwidth	—	20 nm	—
Amplification	—	13 dB	—
Output Power	1.0 W	—	1.2 W
Forward Current	—	—	3.0 A
Reverse Voltage	—	—	0.0 V

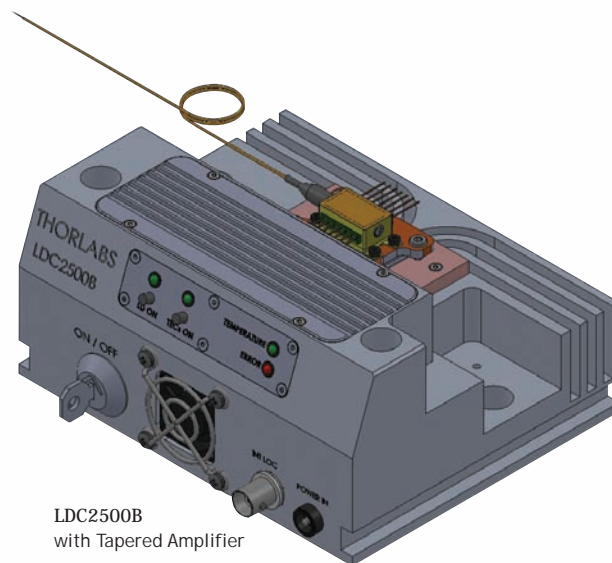
*Specifications subject to change.

Optoelectronics Mount

Thorlabs has designed a mount with integrated controllers that is ideal for use with our 14-pin butterfly tapered amplifiers (see reverse). Due to the large amount of heat generated by tapered amplifiers, the mount has a robust cooling system including heatsinks, a TEC element, and a low-noise fan. Current and TEC controllers have been incorporated into the mount to provide an easy-to-use system. To operate these controllers, a computer can be connected to the mount through USB and controlled via a graphical user interface (GUI).

As tapered amplifiers emit high-power light and they are sensitive to back reflections, we recommend using an optical isolator with the amplifier. This amplifier mount has a convenient receptacle for mounting an optical isolator to protect the amplifier.

While this mount and driver unit has been designed for use with our tapered amplifiers, it can also be used with a number of other high-power, 14-pin butterfly devices.



LDC2500B
with Tapered Amplifier

Specs*	PARAMETER	MIN	TYP.	MAX
	Drive Current	—	—	3 A
	Temperature Stability	—	± 0.1 °C	—
	Operating Temperature	10 °C	—	40 °C
	Power Consumption	—	—	50 W

*Specifications subject to change.

Features

- Compatible with Thorlabs' Tapered Amplifiers
- 14-Pin Butterfly Package Mount
- Integrated Current and TEC Controllers
- Drive Current up to 3 A
- Dual TEC for Chip and Package Temperature Control
- USB Connectivity

For more information or to place an order, contact one of our Customer Support Specialists at 973-300-3000 or visit www.thorlabs.com.