



## DL pro HP - Tunable and Powerful

- Up to 100 mW single-frequency, tunable output
- Standard wavelengths 405, 425, and 633 nm
- Other wavelengths 370 .. 640 nm on request
- Extremely stable, low drift
- Linewidth < 2 MHz

The DL pro HP diode laser features a special resonator design, which allows for higher single-mode output powers from "visible" laser diodes. Manual coarse tuning of the wavelength is possible across the gain spectrum of the diode (for blue diodes approx. 2-3 nm) and mode-hop free fine tuning up to 50 GHz. Standard models are available at 405, 425 nm, and 633 nm; other wavelengths between 370 and 640 nm can be provided on request. The laser features various modulation inputs and includes an isolator. Fiber coupled versions are optionally available.

## Technical Information

**DL pro HP 633**  
cw, single-frequency,  
tunable  
637 nm

max 35 mW  
-4.5 .. +1 nm  
20 .. 50 GHz  
< 2 MHz  
typ < 40 dB  
linear, > 100:1  
Built-in, > 30 dB  
240 x 90 x 90 mm<sup>3</sup>  
SYS DC 110 19"  
15 - 30 °C  
0 - 40 °C  
Non condensing  
100 .. 120 V / 220 ..  
240 V AC  
50 / 60 Hz autodetect  
typ < 100 W, max. 300  
W

## Options & Related Products

### Options:

#### Description

TOPTICA's patented [fiber coupler](#) provides highest single-mode fiber coupling efficiencies, easy alignment and at the same time highest stability. TOPTICA additionally offers a wide range of single-mode and polarization maintaining fibers, including fiber-optic beam splitters. Optical isolation is mandatory for fiber coupled diode laser systems.

A large range of control, stabilization and frequency locking [modules](#) are available.

### Related Products:

- BlueMode: Fixed-frequency laser with active coherence stabilization
- [DL pro](#): pro series ECDL with one of four exceptional AR coated laser diodes
- [DL 100 / pro design](#): pro design ECDL at any DL 100 wavelength
- [DL DFB](#): Diode laser with wide mode-hop free tuning and slightly broader linewidth
- [TA pro](#): pro series ECDL with tapered amplifier (649 .. 1083 nm available)

# DL pro HP

- [BoosTA](#): Semiconductor amplifier for higher powers (649 .. 1083 nm available)
- [Frequency converted diode lasers](#) for all other wavelengths
- AR, FP, and DFB [Laser Diodes](#)
- Numerous [Photonicals](#), tools and helpful equipment for working with lasers, for example [Fabry-Perot Interferometers](#), [Wavelength Meters](#), ...

## Technical Drawings



toptica\_TD\_DL\_pro\_HP  
[toptica\\_TD\\_DL\\_pro\\_HP.pdf](#)

## Applications

- Trapping & quantum computing

## Download