proven.

The lab standard for all atoms and ions



DL pro

Tunable external cavity diode laser for cooling and controlling all atoms and ions

- Intelligent locking to absorption lines or HighFinesse wavelength meters
- Convenient local and remote operation (with DLC pro)
- Efficient atom cooling with narrow linewidth down to 0.6 kHz free running
- Linewidth below 1 Hz possible with lock to external reference cavity on selected wavelengths





www.toptica.com/proven

DL pro



DANGER – AVOID EXPOSING EYES AND SKIN TO THE LASER BEAM, INCLUDING ANY STRAY LASER LIGHT. CLASS 3B LASER PRODUCT, EN 60825-1:2014

Specifications		
Wavelength coverage [nm]	369 519 *, 628 1770 *	
Typical power range	10 300 mW	
Typical coarse tuning range	2 100 nm	
Typical mode-hop free tuning range	≥ 20 GHz	
Typical instantaneous linewidth	0.6 90 kHz	
Typical output beam polarization	linear, > 100:1	
ASE background, typ.	< -40 dB	
Optical isolation	optional	
Fiber coupling efficiency**: min (typ.)	55 (65) %	
Dimensions laser head (H x W x D)	90x90x240/300mm ³ ***	
Environmental conditions	15 - 30 °C (operating), 0 - 40 °C (storage and transport), non condensing	

Other Models			
DL pro HP	DL pro F	DL pro BFY	
Power up to 400 mW	Faster lock	Long-term mode stability	

* Spectral coverage with gaps

** With TOPTICA's FiberDock, efficiencies are possibly lower with strong ellipticity or short wavelengths

*** The standard length is D=240 mm. If needed a housing of D=300 mm is automatically used.

