



## DPSS/Laser Diode Modules Point Lasers

### PRODUCT FEATURES

- ▲ High quality laser diodes
- ▲ Wide range of output power and wavelengths
- ▲ Excellent power & wavelength stability
- ▲ Low power consumption
- ▲ TTL modulation up to 1 MHz

### APPLICATIONS

- ▲ Targeting & alignment
- ▲ Automation & machine vision
- ▲ Analytical & bio-instrumentation
- ▲ Flow cytometry
- ▲ Particle analysis
- ▲ Metrology & instrumentation

**Hazard Note:** This laser module emits radiation that is harmful to the human eye. Depending on wavelength the radiation may be visible or invisible. When in use, do not look directly into the laser emitting aperture. Looking directly at laser emission at close range may cause eye damage.



**Electrical Precaution:** The case is internally connected to the circuit; damaging the anodized surface may result in failure of the laser module.

**Warranty:** One year. No warranty coverage for disassembly, modifications or damage due to abuse or misapplication.

TOPAG offers a wide range of DPSS and laser diode modules with different output power wavelength combinations and many customization options.

#### Standard series laser modules

- ▲ LM series designed for OEM applications where longevity, economical price and small size are important requirements.
- ▲ LDL and LDH series show all features of industrial grade modules including high quality laser diodes, aspherical glass collimator, low power consumption, anodized aluminium housing and reverse polarity protection.
- ▲ DPL modules are DPSS lasers with 1064 or 532 nm, compact design and temperature stabilization for demanding applications.

#### Peltier-cooled laser modules

- ▲ LDT and DPT laser modules for highest requirements in bioanalytics, spectroscopy, particle analysis and other measurement applications. These modules include active temperature stabilization (TEC) and power adjustment. Optionally, TTL modulation up to 1 MHz is available.

#### Computer-controlled laser modules

- ▲ LDC and DPC modules are compact computer-controlled lasers with integrated laser head and control electronics. Output power, TEC temperature and variable modulation up to 1 MHz can be set via RS-232 / USB interface or manually using push buttons. The built-in LCD display shows laser operating parameters. These modules demonstrate excellent beam quality, power stability, temperature control and low noise for demanding applications.

## SPECIFICATIONS

Standard series	LM	LDL	LDH	DPL*
Output power **	up to 3.5 mW	up to 5 mW	up to 400 mW	up to 5 mW
Wavelength	635 – 670 nm	635 – 980 nm	450 – 980 nm	532 nm
Collimation	fixed	adjustable		fixed
Power stability	< 1 %			
Noise	< 0.5 % RMS		< 1 % RMS	
Pointing stability	< 50 µrad		< 25 µrad	
Dimensions (Ø x L, mm)	8 x 36 or 9 x 19 or 9 x 25	10.5 x 26	12 x 51 or 15 x 72	15 x 69
Options	-		TTL modulation & fiber-coupling	

Peltier-cooled series	LDT	DPT *
Output power **	up to 400 mW	up to 50 mW
Wavelength	405 – 980 nm	532 or 1064 nm
Collimation	adjustable	fixed
Power stability	< 0.5 %	
Noise	< 0.5 % RMS	
Pointing stability	< 10 µrad	
Dimensions (Ø x L, mm)	25.4 x 76.2	25.4 x 101.6
Options	TTL modulation & fiber-coupling	

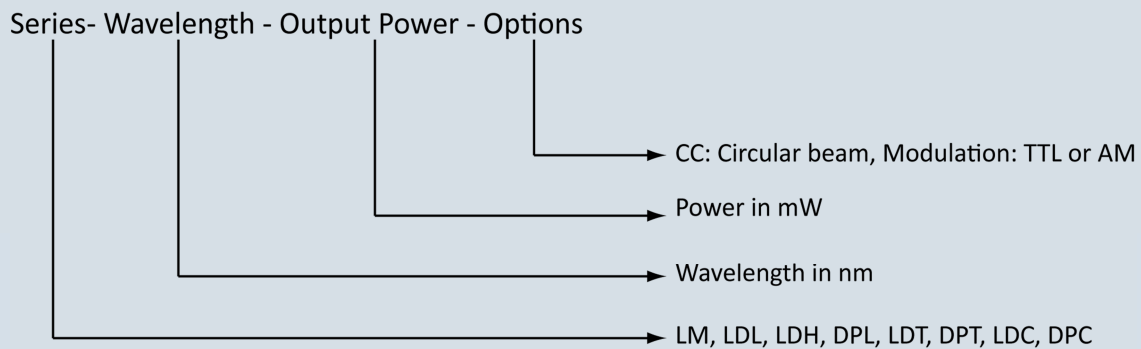
Computer-controlled series	LDC	DPC *
Output power **	up to 150 mW	up to 50 mW
Wavelength	405 – 830 nm	532 or 1064 nm
Collimation	fixed	
Power stability	< 0.5 %	
Noise	< 0.5 % RMS	
Pointing stability	< 10 µrad	
Interface	RS-232/USB	
Dimensions (W x H x L, mm)	40 x 42.5 x 100	
Modulation	TTL modulation, up to 1 MHz	
Options	beam circularization & fiber-coupling	

\* Diode-pumped solid state (DPSS) laser module

\*\* Depending on wavelength

## ORDERING INFORMATION

Please use the following code for ordering:



Examples:

LDH – 405 – 40 – CC - TTL: Point diode laser module with 405 nm wavelength, 40 mW output power, circularized beam and TTL-Modulation.

LDC – 440 – 30 – CC: Computer controlled laser module with 440 nm, 40 mW and circularized beam.

Please add the desired customization options to your request.

## CUSTOMIZATION OPTIONS

- ▲ Custom electronic drivers with firmware and software
- ▲ Mechanical design
- ▲ Fiber-coupled versions (multimode, single mode and polarization-preserving)
- ▲ Modulation
- ▲ Other wavelengths
- ▲ Cable length
- ▲ Connector
- ▲ Supply voltage
- ▲ Working distance
- ▲ Projection Patterns (DOE), for more details please see our datasheet on Pattern Generators