

# LPX-532L DPSS laser

## Optical characteristics \*

**Emission wavelength** 532.3 nm ( $\pm 0.3$  nm tolerance)  
**Linewidth, FWHM**  $\leq 1$  nm

Part number	Free space output	Fiber-coupled output	
		Single mode	Multi mode fiber
LBX-532L-50-CSB-(OE/PPA)	500 mW	350 mW	400 mW

**Power stability**  $\pm 1\%$   
over 8 hour, temperature within  $\pm 3^\circ\text{C}$   
**Power adjustment range** 0 to 100%  
**Control modes** Automatic Power Control (APC)  
**Optical noise**  $\leq 0.5\%$  rms  
10 Hz-20 MHz bandwidth

## External modulations

### Analog Modulation

	<b>L1C-MPA option</b>	<b>L1C-AOM option</b>
<b>Rise / fall time</b>	$\leq 1$ s	$\leq 300$ ns
<b>-3dB modulation bandwidth</b>	-	$\geq 3$ MHz

### Digital Modulation

<b>Rise / fall time</b>	$\leq 30$ ms	$\leq 300$ ns
<b>-3dB modulation bandwidth</b>	-	$\geq 3$ MHz

## Transverse singlemode free-space beam

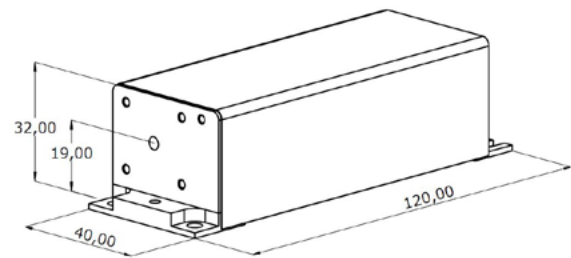
**Beam diameter (typ)** at  $1/e^2$ ,  
5 cm from the beam aperture 0.7 mm  
**Beam divergence** at  $1/e^2$   
full beam, in far field 1 mrad  
**Beam quality factor**  $M^2 \leq 1.1$   
**Beam circularity**, in far field  $\geq 90\%$   
**Polarization state** Linear, vertical at  $\pm 5^\circ$   
**Polarization**  $> 100 : 1$

## General specifications

	Plug and Play version	OEM version
<b>Compliance</b>	CE FDA 21 CFR 1040.10/1040.11	FDA 21 CFR 1040.10 / 1040.11
<b>Operating temperature</b>	10 to 38°C ambient air with optional heat sink	10 to 50°C baseplate
<b>Power consumption</b>	20 W max.	
<b>Storage temperature</b>	0 to 60°C	
<b>Humidity</b>	Up to 90%RH, non-condensing	
<b>Supply voltage</b>	100 to 240 VAC external power supply	5 to 12 VDC
<b>Warm-up time</b>	$\leq 10$ minutes	
<b>Interfaces</b>	USB ControlBoxx controller	USB, RS-232, electronic interface



## Mechanical drawings



## Plug and Play version provide with:

- ControlBoxx controller
- Manual shutter
- DC power supply

## Available options

- ACX-HTSK-1 Heat sink for operation in ambient air up to 38°C
- ACX-HTSK-7 for operation in ambient air up to 46°C
- OPT-CLUP-532 Clean-up filter
- OPT-SHTE-LCX Electro-mechanical shutter
- L1C-MPA for power adjustment
- L1C-AOM for high speed modulation

## Fiber coupling options \*\*

	ACX-FCSMUV or ACX-FCPM	ACX-FCMM-R50
<b>Power stability</b> <small>over 8 hours and within <math>\pm 3k</math></small>	$\pm 2.0\%$	$\pm 2.0\%$
<b>Fiber optical characteristics</b>	3.5 $\mu\text{m}$ core diameter 0.11 N.A	50 $\mu\text{m}$ core diameter 0.22 N.A
<b>Polarization extinction ratio</b> <small>(ACX-FCPM only)</small>	$> 100 : 1$	n/a
<b>Fiber output connector</b>	FC/APC	FC/APC
<b>Fiber length</b>	2 m	2 m

Warranty : 18 months from shipment date

\*Specifications at nominal power

\*\* Variant are available on demand



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