



The LBX-4C is a compact laser combiner system which integrates standard LaserBoxx DPSS and diode modules.

Its modular design authorizes a large choice of laser lines with free space beam output or delivery through single or multiple PM fibers. It is field upgradable for cost effective future extensions.

Available in P&P or OEM version, the LBX-4C comes with a Windows User Interface and is compatible with μ Manager.

LBX-4C Laser Combiner

Benefits

- Up to 4 combined wavelengths
- Modular optical design
- Easy maintenance
- Windows Graphic User Interface
- Optional multiple outputs

Super Resolution Imaging

Confocal Microscopy

SPIM, FRAP, TIRF

Flow Cytometry

Optogenetics

Key features

- Ultra Low Noise < 0.5 %
- Direct modulation
- USB and RS232 computer interface
- SM/PM/MM fiber coupling options

405

445

473

488

515

532

553

561

594

633

640

660

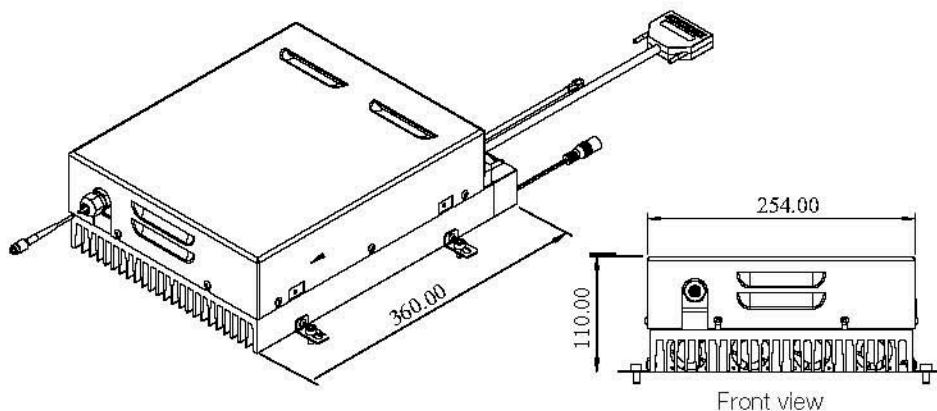
Specifications

	LBX-405	LBX-488	LBX-561 or LMX-561L	LBX-638	Units	
Optical specifications						
Wavelengths	405	488	561	561	638	nm
Wavelength range	± 5	+ 2/- 5	± 2	± 1	+ 5/- 2	
Laser type	Laser Diode	Laser Diode	Doubled LD	DPSS	Laser Diode	
Laser Output Power	50, 100 120, 300	50, 100 150, 200	40	50, 100 200, 300	100, 150	mW
Output Power range	0-100 %	0-100 %	0,1-100 %	0,1-100 % (AOM)	0-100 %	
Free Space Beam Output						
Output Power at exit of the Combiner	45, 95 115, 290	45, 90 135, 180	35	40, 80 160, 240	85, 130	mW
Beam Diameters (typ.)	0.7	0.8	0.7	0.7	0.8	mm
Power Stability over 8 hours and ±3°C, p-p	± 0.5	± 0.5	± 0.5	± 1	± 0.5	%
Optical Noise rms, 10Hz - 20MHz	< 0.5					%
Polarization Ratio	> 100:1					-
PM Fiber Coupling Output						
Coupling Efficiency FC/APC connectors, 1.5m fiber length	> 50					%
Power Stability over 8 hours and ±1.5°C, p-p	± 2					%
Fiber Length 3mm PVC/Kevlar tubing	1.5					m
Exit Connector	FC/APC					-

Other available wavelengths : 445, 473, 515, 532, 553, 594, 633, 642, 660 nm



LBX-4C series, Laser head with optional heatsink



System parameters

- Input Voltage : 115-240 VAC
- Power Consumption : < 100 W
- Operating Temperature : 15 - 30 °C

Analog modulation up to 400 kHz

Options

- 2, 6, 8 laser lines
- Heatsink
- Multiple fiber outputs
- Apochromatic fiber collimator
- Electro-mechanical shutter



VISIBLE AND IN VISIBLE LASER RADIATION
 AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION
 CLASS 4 LASER PRODUCT