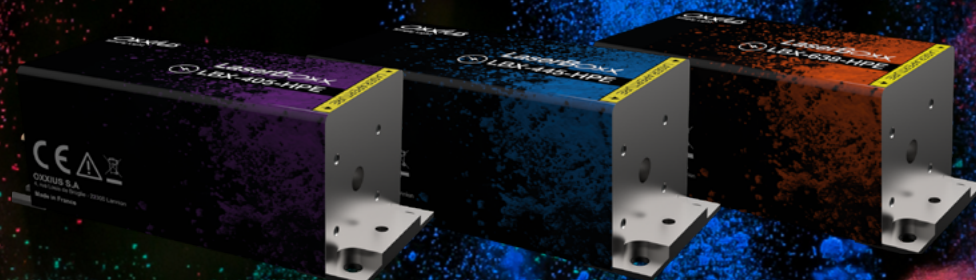


OxxiUS

Simply Light

High Power Lasers



2022

Microscopy
Optogenetics
Illumination
High-throughput inspection

Polymer curing
Laser pumping
Lithography
Additive manufacturing

Description

The LaserBoxx HPE series are high power laser sources offering excellent performance and reliability in a compact, driver-integrated laser head.

The optical output is a multimode elliptical beam, either propagating in free space, or injected into an optical fiber.

Key features

- Laser head with integrated driver
- Elliptical collimated beam
- Multimode fiber coupling option
- Analog modulation function
- USB, RS232 and analog interfaces
- Industry standard compact package

Multimode fiber coupling option

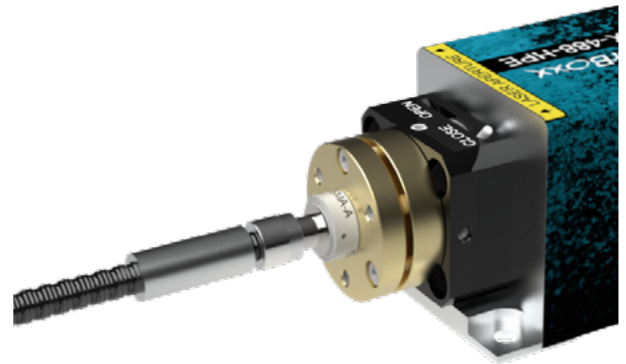
The ACX-FCMM option offers a cost-effective and compact way to couple the LaserBoxx beam into a multimode fiber.

The coupling efficiency exceeds 80%.

The standard option features :

- round-core 50,100 or 200 μm core diameter
- SMA delivery connector
- 0.22 numerical aperture
- 2 meter fiber length
- liquid light guides with mm core diameter

Other configurations are available on request.



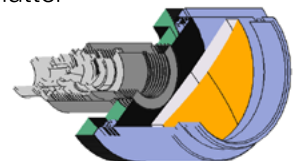
LBX-488 with multimode fiber output



L6Cc-HPE combiner with fiber delivery

Custom capabilities

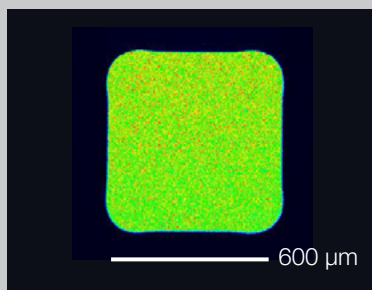
- LaserBoxx HPE sources combined into a L4Cc or L6Cc wavelength combiner
- Speckle reducer option
- Square or hexagonal-shaped delivery fiber core
- Electro-mechanical shutter
- Beam-shaping optics



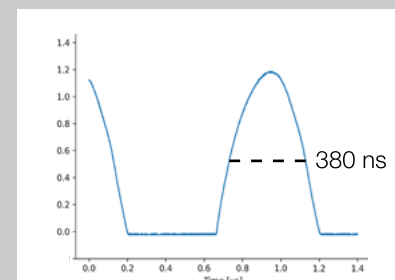
Example of collimator

Performances

Power distribution out of a square-core fiber (LBX-488-1000-HPE)



LBX-520-800-HPE modulated output: 380ns FWHM pulses, 1MHz repetition rate

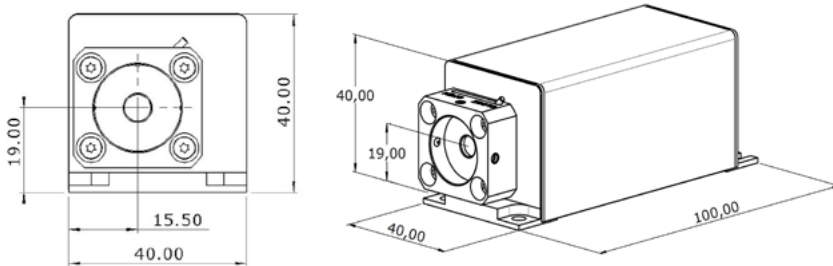


Specifications

	Emission wavelength (typ.)	Linewidth	Power stability over 8h and $\pm 3K$	Output power continuous wave	Beam dimensions (typ.) at $1/e^2$, at laser aperture	Analog modulation function 0-5V input voltage		Multimode fiber coupling option		Supply voltage
						Bandwidth 3dB cut-off frequency, ACC	Rise / Fall time 10 -90%, ACC	Delivered power	Fiber core diameter	
LBX-375	375 nm (± 5 nm)	≤ 5 nm 2 nm typical	$\pm 1\%$ APC	200, 400 mW	3.0 x 1.4 mm	DC-1 MHz	≤ 300 ns	160, 320 mW	50 μ m or larger	5 - 12 VDC
LBX-405	405 nm (± 5 nm)			900, 1200 mW	2.6 x 1.2 mm			720, 960 mW		
LBX-450	450 nm (± 10 nm)		$\pm 1\%$ Automatic power control (APC) and Automatic current control (ACC)	650, 1200 mW	2.6 x 0.7 mm		500, 950 mW			
LBX-473	473 nm (± 5 nm)			1000 mW	2.6 x 1.2 mm		800 mW			
LBX-488	488 nm (± 5 nm)			1000 mW	2.2 x 1.2 mm		800 mW			
LBX-520	520 nm (± 10 nm)			800 mW	2.0 x 0.5 mm		600 mW			
LBX-638	638 nm (± 10 nm)			1100 mW	1.3 x 4.5 mm		750 mW			
LBX-750	750 nm (± 5 nm)			1200 mW	3.8 x 1.9 mm		950 mW			
LBX-785	785 nm (± 5 nm)		$\pm 1\%$ ACC	800 mW	3.8 x 1.9 mm		640 mW	200 μ m or larger		5 - 12 VDC
LBX-830	830 nm (± 5 nm)			1200 mW	5.2 x 2.6 mm		960 mW			
LBX-940	940 nm (± 10 nm)			600 mW	3.8 x 1.9 mm		450 mW	100 μ m or larger		
LBX-980	980 nm (± 10 nm)			1000 mW	3.5 x 1.5 mm		800 mW			

Plug and Play, CDRH-compliant versions

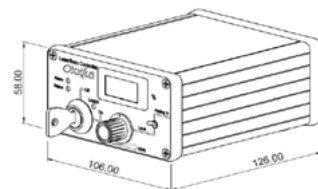
Laser head



	Plug and Play version	OEM version
Compliance	CE FDA 21 CFR 10s40.10/1040.1	FDA 21 CFR 1040.10 / 1040.11
Operating temperature	10 - 38°C ambient air with optional heat sink	10 - 50°C baseplate
Power consumption	≤ 25 W	
Storage temperature	0 to 60°C	
Supply voltage	100 to 240 VAC external power supply included	see table hereabove
Warm-up time	≤ 2 minutes	
Interfaces	USB, RS-232, dedicated electronic interface	

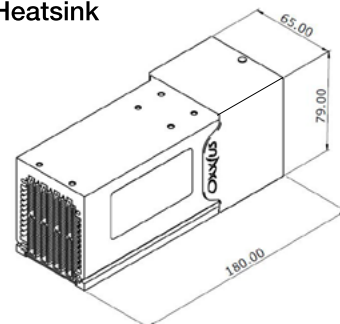
Power-adjustable versions (PPA)

ControlBoxx controller



For improved stabilization (ACX-HTSK)

Heatsink



Contact us

OXXIUS SA

4 rue Louis de Broglie
22300, Lannion, France

sales@oxxius.com

or by phone
+33 296 48 70 28

Distributors

AUSTRALIA

Lastek Pty Ltd
Thebarton campus, University of Adelaide
10 Reid Street Thebarton SA 5031
Phone: (+61) 8 8443 8668
Fax: (+61) 8 8443 8427
E-mail: jessica@lastek.com.au
Web: www.lastek.com.au>Lastek Pty Ltd

INDIA

Dynotech Instruments pvc ltd
803-804, Vishwasadan, Distt Center
Janakpuri, New Delhi-110058
Phone:
E-mail: sales@dynotechmail.in
Web: www.dynotech.in

KOREA

L2K Co., Ltd.
A-305, 289-1 Daehwa-dong
Daedeok-gu Daejeon 306-754
Phone: (+82) 42 670 7744
Fax: (+82) 42 670 7741
E-mail: sales@l2k.kr
Web: www.l2k.kr

SWITZERLAND

Oxxius S.A.
4, rue Louis de Broglie
22300 Lannion
Phone: (+33) 2 96 48 70 28
Mobile: (+33) 6 43 861 801
E-mail: dassous@oxxius.com

UNITED KINGDOM

Photonic Solutions Ltd
Unit 2.2 Quantum Court
Heriot-Watt University Research Park
Edinburgh, EH14 4AP
Phone: (+44) (0)131 664 8122
Fax: (+44) (0)131 449 7301
E-mail: sales@photronicsolutions.co.uk
Web: www.photronicsolutions.co.uk

BENELUX

Oxxius S.A.
4, rue Louis de Broglie
22300 Lannion
Phone: (+33) 2 96 48 70 28
Mobile: (+33) 6 43 86 18 01
E-mail: dassous@oxxius.com

ISRAEL

Rosh Electroptics
P.O.B 2667 Netanya 4212601
Phone: (+972) (0)9-8627401
Fax: (+972) (0)9-8616185
E-mail: info@roshelop.co.il
Web: www.roshelop.co.il

POLAND

Scitec Instruments Polska
Malinowskiego 1/12
PL 02-776 Warszawa
Phone: (+48) 22 406 8127
Fax: (+48) 22 406 8127
E-mail: sales@scitecinstruments.pl
Web: www.scitecinstruments.pl

SPAIN & PORTUGAL

IberOptics Sistemas Ópticos, S.L
C/ Camino de Hormigueras, 124-4, 3º I
E-28031 Madrid
Phone: (+34) 91 3854 395
Fax: (+34)
E-mail: info@iberoptics.com
Web: www.iberoptics.com

USA

RPMC Lasers, Inc.
203 Joseph Street
O'Fallon, MO-63366
Phone: (636) 272 7227
Fax: (636) 272 3909
E-mail: rpmlasers@rpmclasers.com
Web: www.rpmlasers.com

CHINA

Aunion Tech Co., Ltd
Room 905, F building, Everbright
convention and exhibition centre,
No. 86 CaoBao road, ShangHai 200235
Phone: (+86) 21 5108 3793
Fax: (+86) 21 3424 1962
E-mail: info@auniontech.com
Web: www.auniontech.com

ITALY

OPTOPRIM s.r.l
-Via Rota, 37,20900 Monza (MB)
Phone: (+39) 039 834977
- Via Monte Giberto, 15, 00138 Roma
Phone: (+39) 06 87657838
E-mail: info@optoprime.it
Web: www.optoprime.it

RUSSIAN FEDERATION

JSC "LLS"
Russia, 199034, St. Petersburg,
Birzhevaya line, 16, Technopark of ITMO
University, office 401.
Phone: +7 (812) 612-99-82
Fax: +7 (812) 612-99-82
E-mail: info@lenlasers.com
Web: www.lenlasers.ru

SINGAPORE

Acexon Technologies Pte Ltd
21 Bukit Batok Crescent
#20-83 WCEGA Tower, Singapore
Phone: 65-65657300
Fax: 65-65657005
E-mail: sales@acexon.com
Web: www.acexontech.com

VIETNAM

Atek Vietnam Co., Ltd
6th Floor, Viet Asia Building,
9 Duy Tan Street,
Dich Vong Hau Ward,
Cau Giay District, Hanoi City
Phone: (+84) - 4 - 2120.3666
Fax: (+84) - 4 - 3224.2402
E-mail: thanh.nt@atekvietnam.com
Web: www.atekvietnam.com

GERMANY

Laser 2000 GmbH
Argelsrieder Feld 14
D-82234 Wessling
Phone: (+49) (0) 8153 4050
Fax: (+49) (0) 8153 40533
E-mail: contact@laser2000.de
Web: www.laser2000.de

JAPAN

Autex
Shinjuku Takasago Bldg.
4F, 16-5 Tomihisa-Cho,
Shinjuku-Ku, Tokyo 162-0067
Phone: (+81) 3 322 66321
Fax: (+81) 3 322 66290
E-mail: sales32@autex-inc.co.jp
Web: www.autex-inc.co.jp

SCANDINAVIA

Laser 2000 GmbH
Strandbergsgatan 61
S-112 51 Stockholm, Sweden
Phone: (+46) 8 55536235
Fax: (+46) 8 55536122
E-mail: info@laser2000.se
Web: www.laser2000.se

TAIWAN

Bio Accord
No. 142-2 Jiu-Kwang Rd
Panchiao, Taipei county (220)
Phone: (+886) 2 2250 5019
Fax: (+886) 2 2362 3176
E-mail: biotical@ms37.hinet.net
Web: www.bioaccord.com.tw