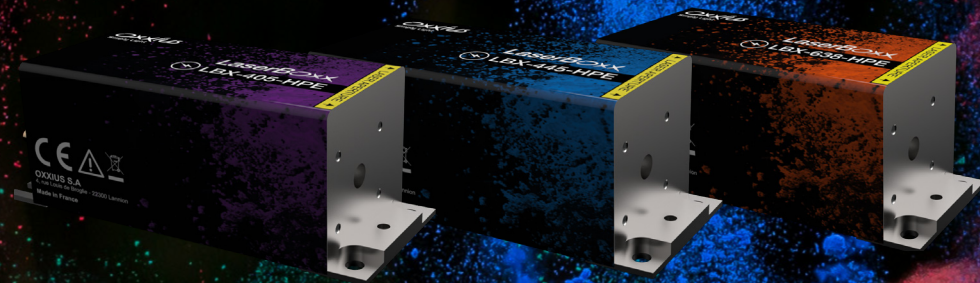


OxxiUS

Simply Light

High Power Lasers



2024

Microscopy
Optogenetics
Illumination
High-throughput inspection

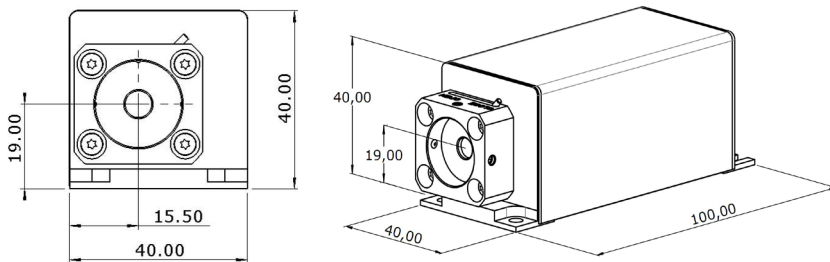
Polymer curing
Laser pumping
Lithography
Additive manufacturing

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 | $\pm 1\%$ | 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) | | | | | | | | | | 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 | 2.7 x 0.8 mm | 600 mW | |
| LBX-638 | 638 nm (± 10 nm) | | | | | | | | | 1100 mW | 4.5 x 4.5 mm | 750 mW | 9 - 12 VDC | |
| LBX-750 | 750 nm (± 5 nm) | | | | | | | | | 1200 mW | 1.9 x 3.8 mm | 950 mW | | |
| LBX-785 | 785 nm (± 5 nm) | | | | | | | | | 800 mW | 3.8 x 1.9 mm | 640 mW | | 200 μ m or larger |
| LBX-830 | 830 nm (± 5 nm) | | | | | | | | | 1200 mW | 5.2 x 2.6 mm | 960 mW | | |
| LBX-940 | 940 nm (± 10 nm) | | | | | | | | | 600 mW | 1.9 x 3.8 mm | 450 mW | | |
| LBX-980 | 980 nm (± 10 nm) | | | | | | | | | 1000 mW | 3.5 x 1.5 mm | 800 mW | | 100 μ m or larger |

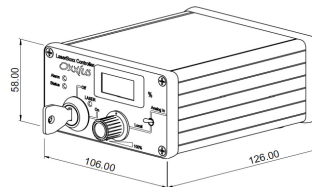
Plug and Play, CDRH-compliant versions

Laser head



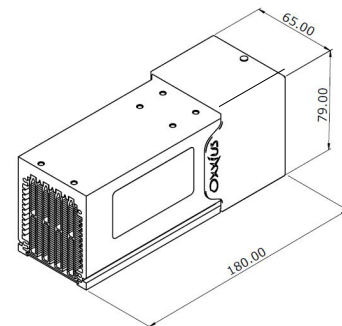
Power-adjustable version (PPA)

ControlBoxx controller



For improved stabilization

Heat sink



| | Plug and Play version | OEM version |
|-----------------------|--|------------------------------|
| Compliance | CE FDA 21 CFR 1040.10/1040.11 | 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 «Specification» table |
| Warm-up time | ≤ 2 minutes | |
| Interfaces | USB, RS-232, dedicated electronic interface | |



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

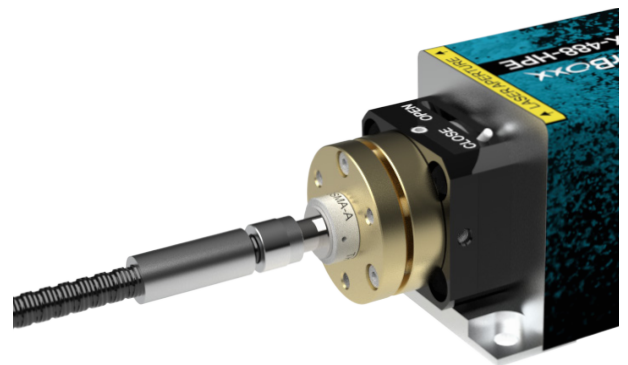
Multimode fiber coupling option

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 models feature :

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



LBX - 488 - 1000 HPE with multimode fiber output

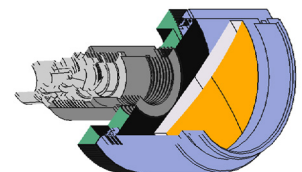
Other configurations are available on request.



L6Cc-HPE combiner with fiber delivery

Custom capabilities

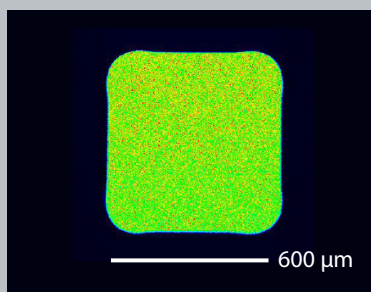
- LaserBoxx HPE sources combined into a L4Cc or L6Cc wavelength combiner
- Speckle reducer option
- Square or hexagonal-shaped delivery fiber core
- Electro-mechanical shutter
- Beam-shaping optics



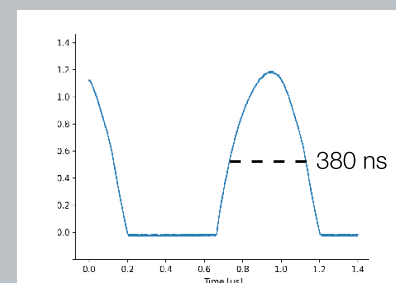
Example of collimator

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



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
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

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

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

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

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@optoprim.it
Web: www.optoprim.it

SCANDINAVIA

Laser 2000 GmbH
Strandbergsgatan 61
S-112 51 Stockholm, Sweden
Phone: (+33) 632 85 89 24
E-mail: froume@oxxius.com

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

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

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@photonicsolutions.co.uk
Web: www.photonicsolutions.co.uk

