Measurement & Spectroscopy

One platform for all colors

SLM CW Monolithic DPSS benefits
- Up to 500 mW
- Exceptional wavelength stability - 1pm
- Lowest power consumption
  - \( \leq 12 \text{ W} \) for LCX's & LPX's, any wavelength, less than 200 mW
  - \( \leq 15 \text{ W} \) for LCX-532 & LCX-1064, 500 mW
  - \( \leq 15 \text{ W} \) for LCX-561 300 mW
- Low profile laser head (32 mm)
- Tailored beam diameter capability (0.6 up to 1.4 mm)

VBG stabilized Laser Diode modules benefits
- Proprietary SLM locking routine
- Enhanced beam quality versions

Common key features
- Single Longitudinal mode
- TEM\(_{00}\) Beam
- Beam pointing \( \leq 5 \mu\text{m}/^\circ\)
- SM/PM/MM fiber coupling options
- USB and RS232 computer interface
- Graphic User Interface with remote diagnostics
- Remote ControlBoxx with power display (Plug&Play versions - CDRH)
- Controllers integrated into laser head
- LBX and LCX - Industry standard footprint (100 x 40 mm\(^2\))

Raman Spectroscopy
Brillouin Scattering
Interferometry
Photoluminescence
Holography
Laser Doppler Velocimetry
Laser Ultrasonic
Dynamic Light Scattering

All-in-One laser
LBX-S and LSX deliver ultra narrow linewidth thanks to its excellent laser diode.

**Benefits**

- High stability and reliability.
- High robustness over the time.
- Insensitive to mechanical vibrations and temperature variations.

**Specifications**

- Laser head weight ≤ 600 g
- Supply voltage 100 - 240V AC
- Warm-up time ≤ 10 minutes (LCX, LPX) / ≤ 2 minutes (LSX, LBX)
- Storage temperature 0 - 60 °C
- Operating temperature 10 - 50 °C

**System Specifications**

- **Version**
  - LCX and LPX
  - LSX and LBX-S
- **Features**
  - RemoteBoxx
  - ControlBoxx
  - L1C-AOM – Acousto-Optic Modulator – DC 3MHz
  - L1C-MPA – Motorized Power Attenuator
  - L1C-ISO – ≥ 25dB Isolation and transmission ≥ 85%

**Electro-Mechanical shutter option**

The ACX-SHTE is a compact and affordable electro-mechanical shutter. It is mounted directly on the LCX or LPX in place of the standard manual shutter. The fiber coupling and other options are fully compatible with the electro mechanical shutter. The ACX-SHTE is actuated via the LCX or LPX embedded software or via standard TTL signal.

**Fiber coupling options**

Fiber coupling options offer rugged and compact solutions to couple LaserBoxx into polarization maintaining fiber, standard single mode fiber or multimode fiber.

**Advanced features with L1C platform**

The L1C platform offers an efficient, compact and cost effective solution to add advanced features to the LCX, LPX, LSX or LBX-S lasers:

- L1C-ISO – ≥ 25dB Isolation and transmission ≥ 85%
- It comes in standard with the electromechanical shutter.

**LiNb Raman Spectrum**

Obtained with LSX-785S

www.oxxius.com
Mechanical Drawings

LCX series, Plug & Play DPSS Laser

LPX series, Plug & Play DPSS Laser

LBX series, Plug & Play Stabilised laser diode

LSX series, Plug & Play Stabilized laser diode Integrated isolator

PPA - ControlBoxx

PPF - RemoteBoxx

Optional heatsink for LCX and LBX series

For power adjustable versions

For fixed power versions

Optional air-forced heat sink for maximum ambient temperature of 38°C.

LCX series, OEM DPSS Laser

LPX series, OEM DPSS Laser

LBX series, OEM Stabilized laser diode

LSX series, OEM Stabilized laser diode Integrated isolator

All-In-One laser head with built-in controllers. Input voltage range: 5-12 V DC

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Oxxius has a policy of continuous product improvement. Specifications may change without notice.