

# Coherent® OBIS™ LX SF 1448284 | 405nm LX SF 40mW Single Frequency Laser

#18-722



Coherent® Single Frequency OBIS™ LX Laser Systems는 Coherent사의 SureLock™ volume holographic grating (VHG) stabilized laser diode가 내장된 제품으로서 기타 [OBIS LX/LS 플랫폼](#)과 동일한 외형으로 일관성 있는 단일 주파수 성능을 제공합니다. 405, 633, 660nm에서 이용이 가능한 이 레이저 시스템은 특히 0.05% 미만의 매우 낮은 RMS 신호대잡음비(SNR)을 필요로 하는 응용 분야에서 탁월한 성능을 발휘합니다. Stabilized HeNe laser의 우수한 대안품인 이 레이저는 Coherent의 Power-Locker® volume holographic grating을 사용해 안정화가 되어 정확하고 안정적인 중심 파장, 낮은 온도 의존성, 일관된 광학적 성능을 보장합니다. Coherent® Single Frequency OBIS™ LX Laser Systems는 공초점 현미경 검사, DNA 염기서열 분석, 유세포 분석, 간섭 계측과 같은 용도에 이상적으로 사용할 수 있으며, 기타 OBIS LX/LS power supply, 액세서리, 소프트웨어와 호환이 가능합니다.

## General

Warm-Up Time (minutes):	<5
Manufacturer:	Coherent®
Type of Laser:	Diode
Laser Class - CDRH:	IIIb
Model Number:	1448284

## Physical & Mechanical Properties

Pointing Stability (μrad/°C):	<5
Pointing Stability (μrad):	<30

## Optical Properties

Polarization:	100:1 (minimum)
Spatial Mode:	TEM <sub>00</sub>
Wavelength (nm):	405.00 ±1
Mode Quality, M <sup>2</sup> :	≤1.5
Beam Diameter Tolerance (mm):	±0.1
Beam Diameter (mm):	0.4
Spectral Line Width (MHz):	160
Beam Divergence (mrad):	Full-Angle: <2
Color:	Violet
Spectral Line Width (pm):	0.3 (maximum)

## Electrical

Output Power (mW):	40
Power Stability (%):	<1
RMS Noise:	≤0.05% (20Hz to 20MHz)
Peak-to-Peak Noise:	<0.5% (20Hz to 20kHz)

## Hardware & Interface Connectivity

Power Supply:	Power Supply Required and Sold Separately: USA: <a href="#">#87-473</a> Europe: <a href="#">#87-473</a> Japan: <a href="#">#87-473</a> Korea: <a href="#">#87-473</a> China: <a href="#">#87-473</a>
Output Type:	Free Space

## Environmental & Durability Factors

Operating Temperature (°C):	+10 to +50
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June 22, 2025

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

재고 번호	제품설명
18-722	Coherent® OBIS™ LX SF 1448284   405nm LX SF 40mW Single Frequency Laser

This item is EU RoHS (2015/863/EU) exempt based on **Exemption 6c**: Copper alloy containing up to 4% lead by weight, **Exemption 7a**: lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead), and **Exemption 7c-I**: electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance  
June 22, 2025

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | [Compliance@edmundoptics.com](mailto:Compliance@edmundoptics.com)



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This item contains substances listed on the REACH SVHC list as of 10 June 2022 in quantities exceeding 0.1% weight by weight, please contact [compliance@edmundoptics.com](mailto:compliance@edmundoptics.com) if you require more information.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts "non-hazardous" glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

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재고 번호

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제품설명

Coherent® OBIS™ LX SF 1448284 | 405nm LX SF 40mW Single Frequency Laser

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations

INCLUDED HARDWARE

- NOT SHOWN
- 4 EACH:M3X35mm HEX SCREWS
- 4 EACH: #4 FLAT WASHERS
- 1 EACH: 2.5mm HEX WRENCH

