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# Coherent® OBIS™ 1178771 | 514nm LS 20mW Laser

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Stock #87-462 **1 In Stock**

⊖ 1 ⊕ €5.690<sup>00</sup>

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**Note:** This item requires accessories for use | [Learn More](#)

**Product Downloads**



**General**

**Warm-Up Time (minutes):**  
<5

**Manufacturer:**  
Coherent®

**Type of Laser:**

Diode

Laser Class - CDRH:

IIIb

Model Number:

1178771

## Physical & Mechanical Properties

Pointing Stability ( $\mu\text{rad}/^\circ\text{C}$ ):

<5

Pointing Stability ( $\mu\text{rad}$ ):

<30

## Optical Properties

Polarization:

100:1

Spatial Mode:

TEM<sub>00</sub>

Wavelength (nm):

514.00  $\pm$ 2

Mode Quality, M<sup>2</sup>:

$\leq$ 1.1

Beam Diameter Tolerance (mm):

$\pm$ 0.05

Beam Diameter (mm):

0.7

Beam Divergence (mrad):

Full-Angle:  $\leq$ 1.2

Color:

Green

## Electrical

Output Power (mW):

20

Power Stability (%):

<2

Modulation Frequency (MHz):

Max Digital: 0.05

Modulation Frequency (kHz):

Max Analog: 100

RMS Noise:

$\leq$ 0.05% (20Hz to 20MHz)

## Hardware & Interface Connectivity

Power Supply:

Power Supply Required and Sold Separately.

USA: [#87-473](#)

Europe: [#87-473](#)

Japan: [#87-473](#)

Korea: [#87-473](#)

China: [#87-473](#)

Output Type:

Free Space

## Environmental & Durability Factors

Operating Temperature ( $^\circ\text{C}$ ):

10 to 40

## Regulatory Compliance

RoHS 2015:

[Exempt](#)

Reach 224:

[Contains SVHC\(s\)](#)

Certificate of Conformance:

[View](#)

## Product Details

- Same Compact Design for All Wavelength Options
- Integrated Control Electronics with Analog and Digital Modulation
- Circular Beam with Superior Beam Quality
- [Coherent® High Performance OBIS™ LX/LS Fiber-Pigtailed Laser Systems](#) Also Available

Coherent® High Performance OBIS™ LX/LS Laser Systems are compact, plug-and-play lasers that offer a wide range of wavelengths from the ultraviolet to the near-infrared in a single platform. Although each laser utilizes one of two technologies, either Coherent's proprietary Optically Pumped Semiconductor Laser (OPSL) or laser diode-based, these laser systems feature the same beam parameters in packages that allow the user to plug-and-play alternate wavelengths as needed. Coherent® High Performance OBIS™ LX/LS Laser Systems includes a USB, RS-485, and full I/O interface. A multicolor LED has been integrated into the top cover to provide laser status at a glance.

### OBIS Laser System Startup Guide

This downloadable PDF provides guidance on interfacing with OBIS controllers and power supplies, mounting and connecting the heatsink, and starting modulation.

**Note:** A power supply is required for operation and sold separately. OBIS remote is required for CDRH certified systems. The OBIS heat sink is recommended.

Three power supply options are available, but only one is required. **#87-472** (not CDRH certified) includes a power supply with power cord. **#87-473** (CDRH certified) includes a 1m laser-to-remote cable, and DC power supply with power cable. **#87-475** (CDRH certified) includes a 6 laser scientific remote, internal power supply, and six 1m laser-to-remote cables with power cord.

Coherent® High Performance OBIS™ LXLS Laser Systems are designed for an extensive range of OEM or scientific applications including environmental monitoring, inspection, or machine vision, or for use in the life sciences for the fluorescence excitation of dyes and proteins in flow cytometry, microscopy, DNA sequencing, polymerase chain reaction (PCR) diagnostic instruments, or drug delivery. These lasers feature smart electronics to ensure superior low-noise optical performance, and an ultra-small controller that has been integrated into the laser head.

## Technical Information

