

# OBIS LX/LS Laser Box

## Laser Mount with Cooling, Interface and Power Supply

OBIS LX and OBIS LS laser products come with a variety of accessories to support your application needs.

The OBIS Laser Box for OBIS LS and OBIS LX offers all the features from the laser in a convenient CDRH-compliant interface with convection cooling for five lasers.

As with all OBIS LX and OBIS LS lasers, the laser itself offers a stand-alone all-in-one laser solution. OBIS lasers come with a Power Connection, USB Connection, Fan Connection and a SDR-type Connection for laser control I/O. All of these are on the back panel of every OBIS LX/LS laser.

To simplify integration, the OBIS Laser Box connects to the single SDR-type connector for power, signals and communication. The OBIS Laser Box then brings all of these features to the front panel controls and connectors.

### FEATURES & BENEFITS

- Integrated five bay mount for OBIS lasers
- Heat sinks and cooling fans
- Modulation inputs for analog and digital for five lasers
- USB and RS-232 interface for additional control from host computer
- Coherent Connection software for PC
- Status indicators for each laser
- External power supply
- Laser safety features such as key switch and interlock

### APPLICATIONS

- Laboratories needing CDRH features
- Applications wanting a simple Analog or Digital inputs to control the laser
- Applications wanting thermal management (cooling) for the lasers



SPECIFICATIONS <sup>1</sup>	OBIS LX/LS Laser Box	
OBIS Laser Box Laser Box - five bay <sup>1</sup> Power Supply <sup>2</sup>	Part Number 1228877 Included	Part Number 1343229 Included
Host Computer Remote Control via USB <sup>3</sup>	USB 2.0, Mini B	
Host Computer Remote Control via RS-232 <sup>3</sup>	RS-232, 115.2K, DB-9F	
Analog Inputs, 5 each	SMB Connector, 0V to 5V, 2000 Ω input impedance	
Digital Inputs <sup>4</sup> , 5 each	SMB Connector, 0V to 3V, 50 Ω input impedance	SMB Connector, 0V to 3V, 2000 Ω input impedance <sup>5</sup>
Interlock	Yes, included with shorting wire	
Laser Status Indicators	Yes, Individual LED for each Laser	
Warm-up Time (minutes) (from cold start)	<2	
Coherent Connection Software for PC	Included on USB drive with user manual	
Safety	Key switch and interlock	
UTILITY AND ENVIRONMENTAL REQUIREMENTS		
Power Consumption (W) (typical)	5 (without lasers)	
Power Consumption (W) (maximum)	140 (with 5 lasers)	
Internal Cooling Fan	Yes, 3 each	
Power Input to Laser Box, 6 Pin (VDC)	10 to 14 at 10A maximum, Molex P/N 43025-0600 for mating connector	
Power Cord (USA)	2.4m (8 ft.)	
Operating Condition <sup>6</sup> (°C)	10 to 40 for OBIS LX, 10 to 35 for OBIS LS	
Non-operating Condition <sup>6</sup> (°C)	-10 to 60	
Shock Tolerance (g) (6 ms)	20	
Operating Voltage (VAC)	90 to 264, 47 to 63 Hz	
Dimensions (L x W x H)		
Laser Box	241 x 184 x 88 mm (9.5 x 7.3 x 3.5 in.)	
Power Supply	189 x 89.4 x 47.1 mm (7.4 x 3.5 x 1.9 in.)	
Weight		
Laser Box	3.9 kg (8.5 lbs.)	
Power Supply	0.9 kg (2.0 lbs.)	

<sup>1</sup> Lasers sold separately.

<sup>2</sup> Power supply included. Order item number 1211389 for spare or replacement.

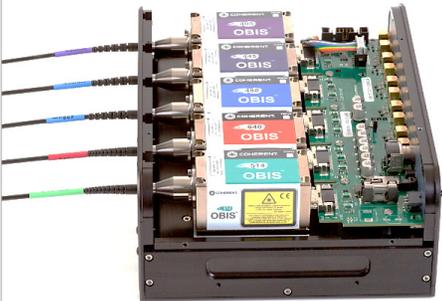
<sup>3</sup> Host computer not provided. RS-232 cable not provided.

<sup>4</sup> Digital Modulation can be driven up to 5 Volts.

<sup>5</sup> With 2000 Ω Digital Modulation Impedance the OBIS LX laser will have a limited Digital Modulation bandwidth of ~20 MHz.

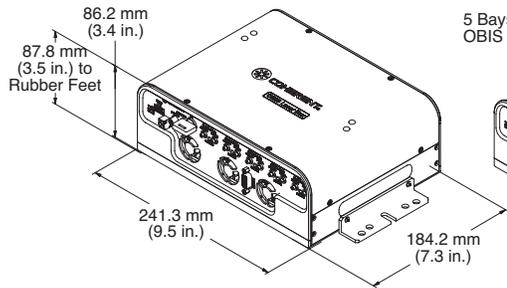
Order 1228877 for the 50 Ω Digital Modulation Impedance to obtain the full OBIS LX maximum Digital Modulation bandwidth of 150 MHz.

<sup>6</sup> Non-condensing.

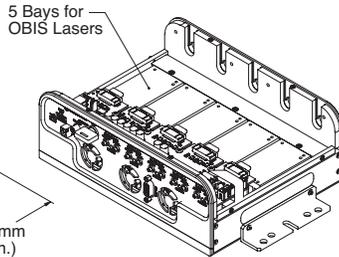
Example of OBIS Laser System	Description
	<p><b>Figure 1:</b> OBIS LX/LS Laser Box with the lid removed</p>
	<p><b>Figure 2:</b> OBIS LX/LS Laser Box example as part of an OBIS Galaxy Beam Combiner System. OBIS Lasers and OBIS Galaxy Beam Combiner sold separately.</p>
	<p><b>Figure 3:</b> OBIS LX/LS Laser Box example with 5 OBIS Lasers installed. OBIS Lasers sold separately.</p>

## MECHANICAL SPECIFICATIONS

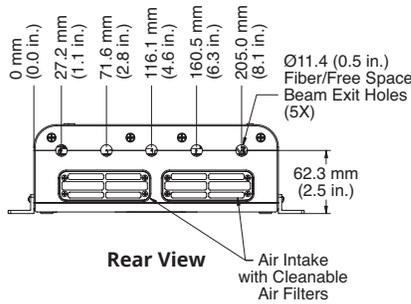
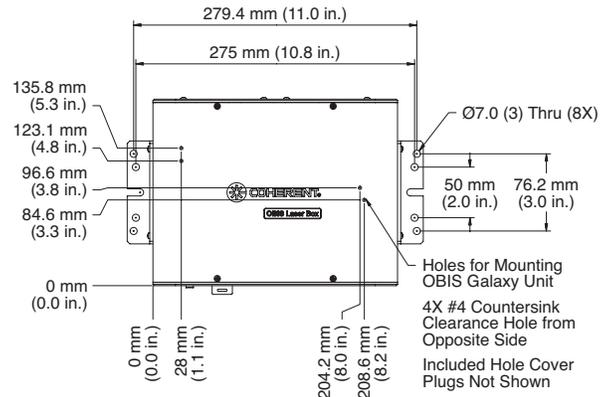
### OBIS Laser Box



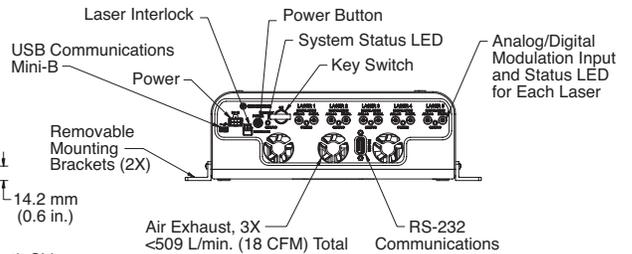
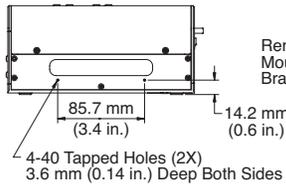
With Top Cover Removed



Top View



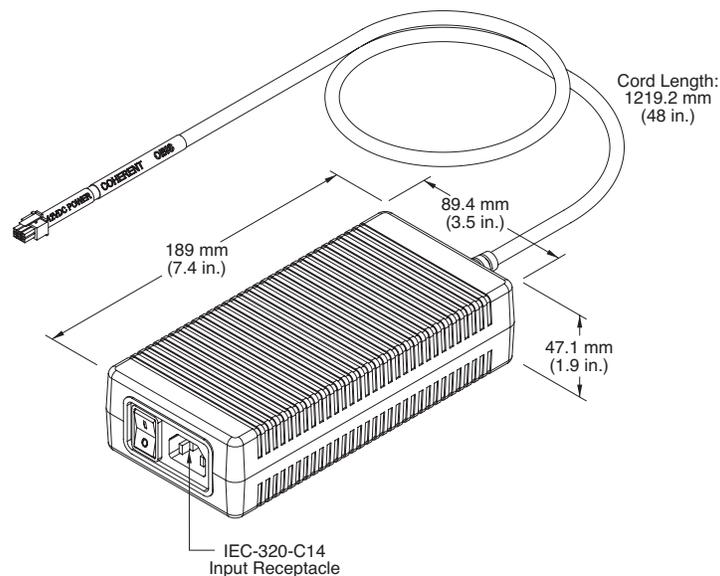
Side View (Mounting Bracket Shown Removed)

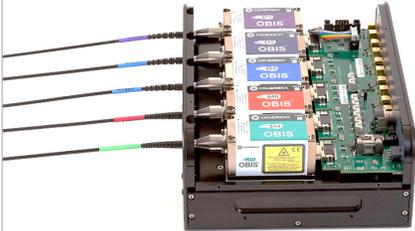


Front View

### OBIS 6-Laser Remote Power Supply

Part #1211389 included



Optional OBIS Laser Remotes	Description
	<p>OBIS LX/LS Single Laser Remote with full features for control with analog/digital inputs. Includes USB and RS-232 on the Remote.</p> <p>Part Number 1214875 OBIS LX/LS Single Laser Remote, with Power Supply, 1 meter laser-to-remote (SDR) cable, USB cable and software.</p>
	<p>OBIS LX/LS 6-Laser Remote with CDRH features. Separate power switches and power cables for each laser. NOTE: Does not support modulation inputs.</p> <p>Part Number 1203909 OBIS LX/LS 6-Laser Remote, with Power Supply, 6 power cables from laser-to-remote and software.</p>
	<p>OBIS LX/LS Scientific Remote with full features for control with analog/digital inputs for up to six lasers. User interface touch screen and connectivity through USB, RS-232 and Ethernet.</p> <p>Part Number 1234466 OBIS LX/LS Scientific Remote, with internal Power Supply, 6 laser-to-remote (SDR) cables and software.</p>
	<p>OBIS LX/LS Laser Box with five laser mounting bays with thermal management, cooling fans, analog/digital inputs, RS-232, USB, key-switch and interlock in one compact package. Lasers sold separately.</p> <p>Part Number 1228877 OBIS LX/LS Laser Box, with Power Supply, USB cable and software. Analog Modulation Impedance = 2k <math>\Omega</math>, Digital Modulation Impedance = 50 <math>\Omega</math>.</p> <p>Part Number 1343229 OBIS LX/LS Laser Box, with Power Supply, USB cable and software. Analog Modulation Impedance = 2k <math>\Omega</math>, Digital Modulation Impedance = 2k <math>\Omega</math>.</p>



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all OBIS LX/LS Laser Boxes. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative.  
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