

# 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.

The OBIS Laser Box offers stability over temperature with conduction cooling for the laser baseplate and cooling fans to maintain the convection cooling.

Every OBIS Laser Box comes with a separate 12V DC power supply with capacity to drive the five lasers, interface and cooling.



**Superior Reliability & Performance**

### **OBIS LX/LS Laser Box Features:**

- **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**

### **OBIS LX/LS Laser Box 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**

# OBIS LX/LS Laser Box

Laser Mount with Cooling, Interface and Power Supply

System Specifications		OBIS LS/LX Laser Box
OBIS Laser Box		
Laser Box – five bay <sup>1</sup>		Part #1228877
Power Supply <sup>2</sup>		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, 8N1, DB-9F
Analog Inputs, 5 each		SMB Connector, 0V to 5V, 2000 Ohm input impedance
Digital Inputs <sup>4</sup> , 5 each		SMB Connector, 0V to 3V, 50 Ohm input impedance
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>5</sup> (°C)	10 to 40 for OBIS LX, 10 to 35 for OBIS LS
Non-operating Condition <sup>5</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 and USB cable not provided.

<sup>5</sup> Non-condensing.

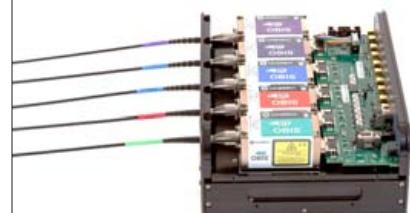
<sup>4</sup> Digital Modulation can be driven up to 5 Volts.

## Example of OBIS Laser System

**Figure 1:** Laser Box with the lid removed



**Figure 2:** Laser Box example as part of a Galaxy beam combiner system. Lasers and Galaxy Beam Combiner sold separately.



**Figure 3:** Laser Box example with 5 lasers installed. Lasers sold separately.

## OBIS LX/LS Laser Box

Laser Mount with Cooling, Interface and Power Supply

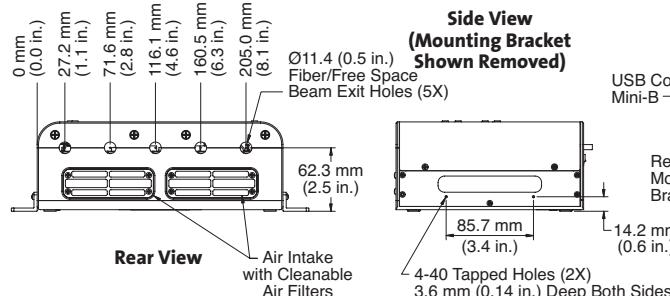
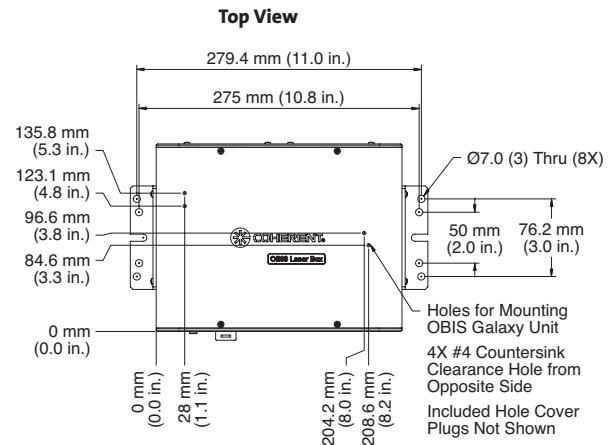
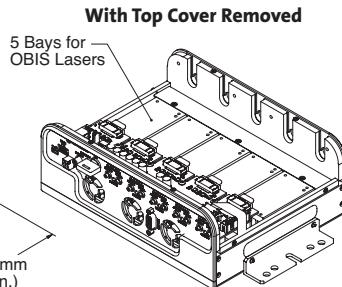
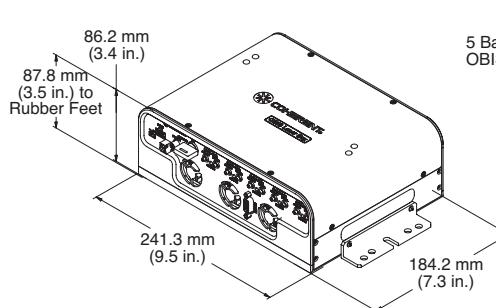
Other OBIS Laser Remotes	Description
	OBIS LX/LS Single Laser Remote with full features for control with analog/digital inputs. Includes USB and RS-232 on the Remote.
	OBIS LX/LS 6-Laser Remote with CDRH features. Separate power switches and power cables for each laser.
	OBIS LX/LS Scientific Remote 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.
	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.

# OBIS LX/LS Laser Box

Laser Mount with Cooling, Interface and Power Supply

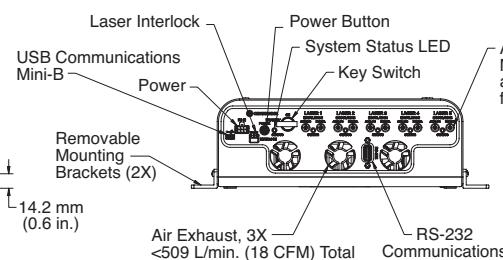
## Mechanical Specifications

### OBIS LS/LX Laser Box



Rear View

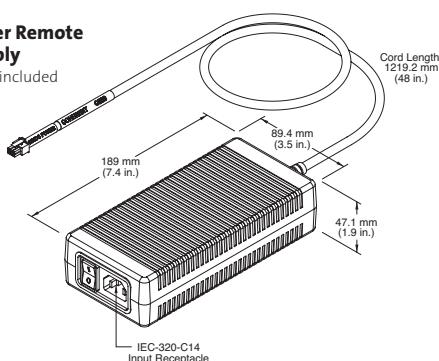
Side View  
(Mounting Bracket  
Shown Removed)



Front View

### OBIS 6-Laser Remote Power Supply

Part #1211389 included



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 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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[www.Coherent.com](http://www.Coherent.com)

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