

# Sapphire CDRH Controller

Operate, Control, and Monitor  
Sapphire Laser Heads

The Sapphire CDRH Controller provides controller and power supply in a wall plug-ready box, featuring a standby/laser ON switch and remote control options via Analog, RS-232 and USB interface.

The CDRH Controller enables and simplifies stand-alone applications: it can operate, control and monitor all Sapphire laser heads. A Sapphire CDRH laser head and a Sapphire CDRH Controller when properly installed is CDRH-compliant.

## Features and Benefits

- One-box wall plug controller and power supply
- Enables stand-alone applications (CDRH Compliant)
- Standby/Laser ON key switch
- Remote interlock
- Remote control option via Analog, RS-232, or USB interface
- Laser power adjustment and graphic display (optional)
- Front panel control with laser power adjustment and status display (optional)
- Status LEDs

## Sapphire CDRH Controller for:

- Sapphire LP
- Sapphire FP
- Sapphire SF
- Sapphire SF NX
- Sapphire LPX



## SPECIFICATIONS

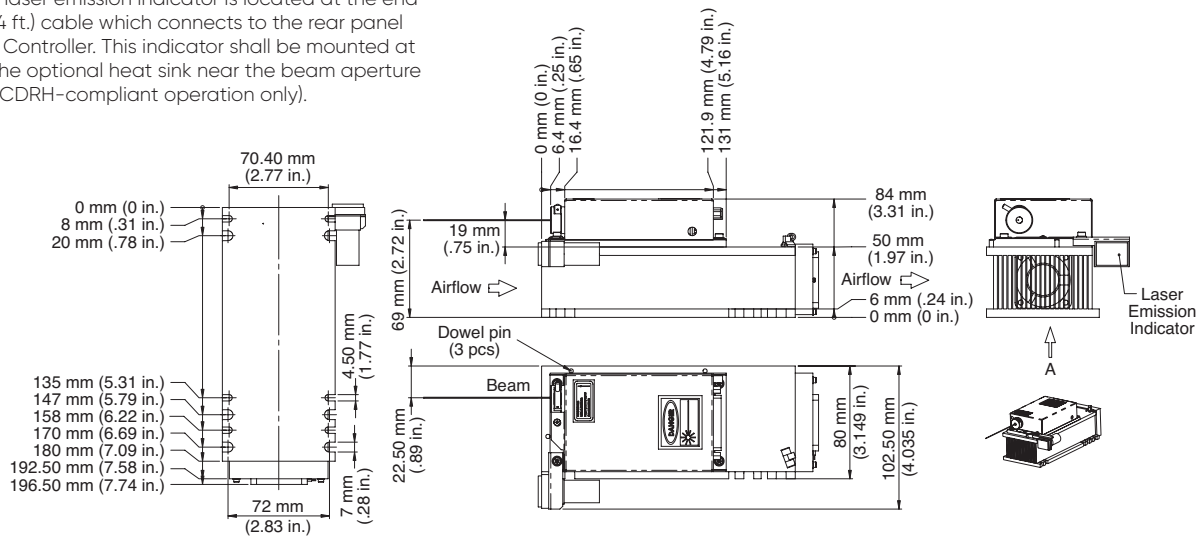
UTILITY AND ENVIRONMENTAL REQUIREMENTS	Sapphire LP/FP/SF CDRH Controller	Sapphire SF NX/LPX CDRH Controller
Power Consumption (VA)	<150	
Operating Voltage	100 to 240 VAC ±10%, 50/60 Hz	
Ambient Temperature Operating Conditions Non-Operating Conditions	10 to 40°C (50 to 104°F), non-condensing -30 to 60°C (-22 to 140°F)	
Dimensions <sup>1</sup> (L x W x H)	196 x 164 x 99.5 mm (7.72 x 6.46 x 3.92 in.)	230 x 198 x 90 mm (9.06 x 7.80 x 3.54 in.)
Cable Length (Head to Controller)	2 m (6.56 ft.), optional 5 m (16.4 ft.)	1.5 m (5.0 ft.)
Weight	1.85 kg (4.08 lbs.)	2.5 kg (5.51 lbs.)
Part Number	1189089 (Sapphire LP/FP/SF CDRH Controller)  1170412 (Sapphire LP/FP CDRH Controller w/o display)	1397910 (Sapphire SF NX CDRH Controller)  1398222 (Sapphire LPX CDRH Controller)

<sup>1</sup> Please consider additional space for the front panel switches and the cable connections on the rear panel.

## MECHANICAL SPECIFICATIONS

### Laser Emission Indicator (optional)

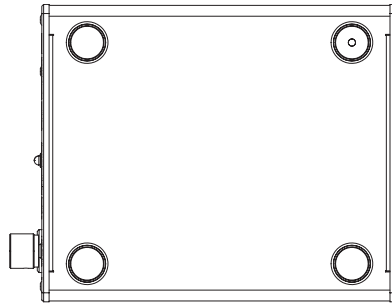
The optional laser emission indicator is located at the end of a 5 m (16.4 ft.) cable which connects to the rear panel of the CDRH Controller. This indicator shall be mounted at the front of the optional heat sink near the beam aperture (required for CDRH-compliant operation only).



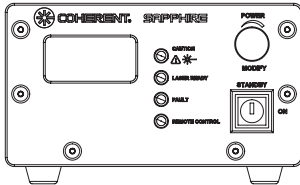
## MECHANICAL SPECIFICATIONS

CDHR Controller - Sapphire LP/FP/SF

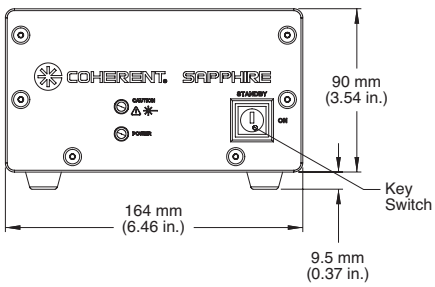
Top View



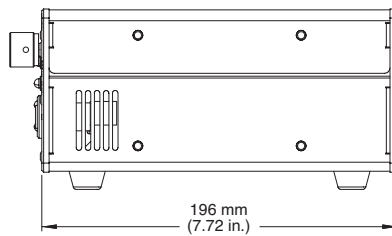
Front View  
(Display Version)



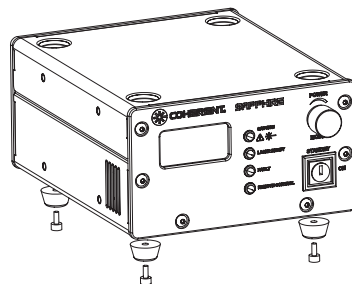
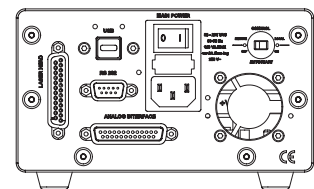
Front View  
(Non-Display Version)



Side View



Rear View



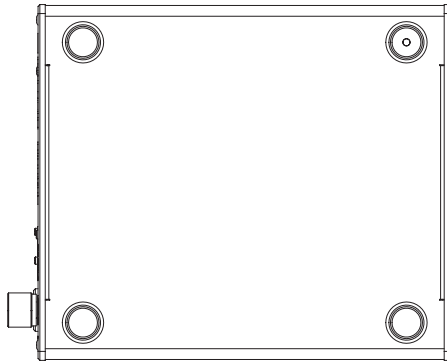
# Sapphire CDRH Controller

Operate, Control, and Monitor Sapphire Laser Heads

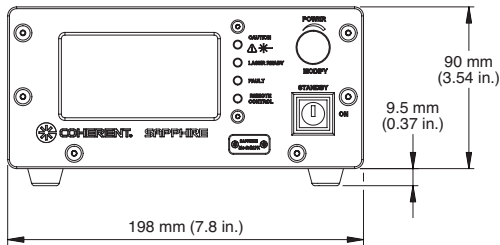
## MECHANICAL SPECIFICATIONS

CDHR Controller - Sapphire LPX/SF NX

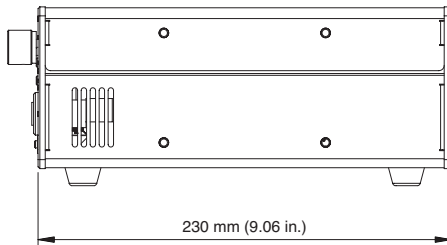
Top View



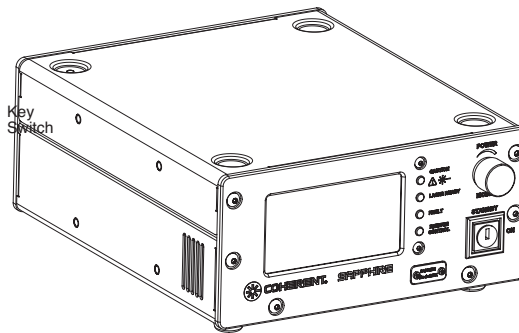
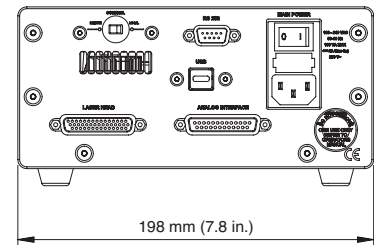
Front View



Side View

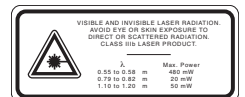
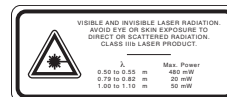
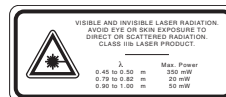
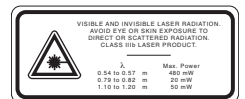
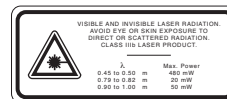
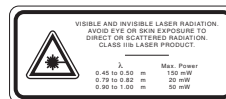


Rear View



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Coherent offers a limited warranty for all PowerLine F 10 QS Lasers. 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. MC-022-14-0M0122Rev.D Copyright ©2022 Coherent, Inc.

U.S. Patent No. 5,954,978  
U.S. Patent No. 5,991,318  
U.S. Patent No. 6,097,742  
U.S. Patent No. 6,167,068  
U.S. Patent No. 6,370,168

