

Compact Mini Series

Industrial High Power Diode Laser

The Compact Mini lasers are fiber-coupled diode lasers offering up to 50 W output power. These lasers have been set-up for easy integration, flexibility and reliability in industrial applications such as selective soldering and plastic welding. Their user friendly graphic interface via USB port allows also simple operation as stand-alone unit.

Compact Mini lasers are available with various accessories and provide flexibility for the integration into a wide range of laser-based manufacturing systems and scientific applications.

FEATURES & BENEFITS

- Output power: up to 50 W
- Fiber-Coupled
- Air-Cooled
- Long life diode modules

APPLICATIONS

- Plastics Welding
- Selective Soldering
- Heat Treatment
- Scientific Applications







SPECIFICATIONS	Compact Mini
Nominal Power (W)	30
Power Range (%)	10 to 100
Laser Beam Quality (BPP) (mm * mrad)	44
Power Stability Over 24-hour; Cooling Water $\Delta T = \pm 1$ K (%)	± 2
Pulse Frequency Range (Hz)	100
Laser On-Signal (Hz)	100
Analog Modulation (Hz)	750
Wavelength (nm)	1064
ELECTRICAL RATINGS	
Voltage	100 to 240 (1P/N/PE)
Connected Load (kVA)	~0.35
Effective Power at Nominal Power (kW)	≤ 0.15
Max. Current Consumption at 400 V (A)	≤ 3.7
Fuses Type NH (A)	16
FIBER DELIVERY SYSTEM	
Interface	SMA*
Diameter (μm)	400
Numerical Aperture	0.22
Length** (m)	≤ 20
Accessories (options)	Fixed Optics
DIMENSIONS & WEIGHTS	
Laser Dimension (L x W x H) (mm)	336 x 144 x 169
Laser Weight (kg)	5 kg
ENVIRONMENTAL CONDITIONS	
Ambient Temperature in Operation	18 to 35°C (64 to 95°F)
Storage Temperature	5 to 50°C (41 to 122°F)
CUSTOMER INTERFACE	
Analog Power (V DC)	0 to 10
Digital Signals (V DC)	24

* Non-detachable fiber

** Fiber is not included

AVAILABLE ACCESSORIES

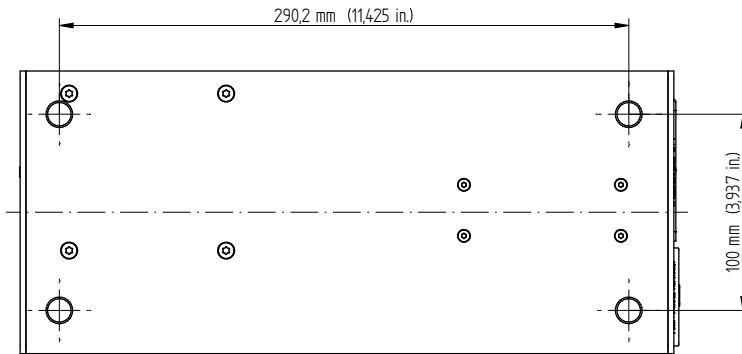
COLLIMATORS	FIXED OPTICS	OPTICS FOR RADIAL WELDING	LINE OPTICS
			
<p>Collimators are available in different focal lengths for SMA and QBH fiber connectors.</p>	<p>The processing head with an integrated pyrometer is used for non-contact measuring of the workpiece temperature and enables closed-loop temperature control.</p>	<p>The processing head enables simultaneous welding of a symmetrical radial component without rotating the part or optics. The envelope and optical performance can be optimized to the specific welding geometry.</p>	<p>Used for applications requiring a rectangular or square spot. Customized optical layouts allow a wide variation of different focus.</p>

All processing heads are available with SMA or QBH fiber connector.

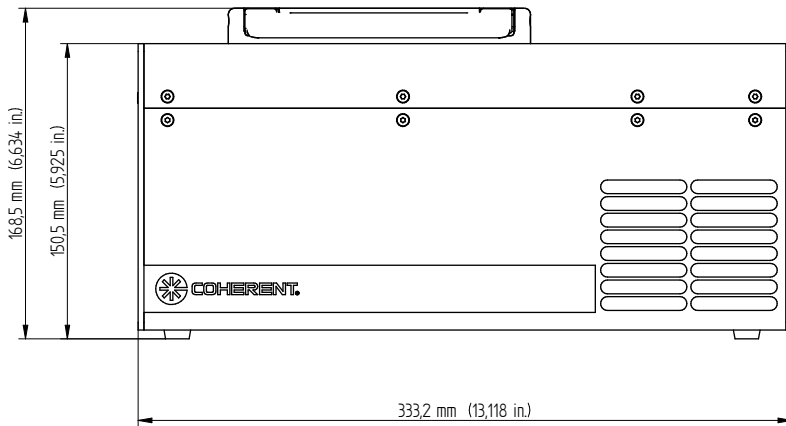
MECHANICAL SPECIFICATIONS

Compact Mini Series

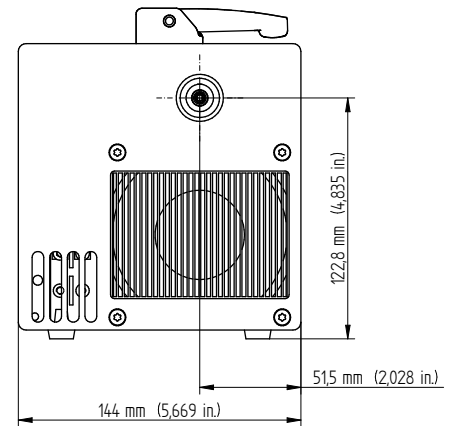
Top View



Side View



Front View



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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 Diode Laser Systems. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative. MC-021-19-0M0619 Copyright ©2019 Coherent, Inc.

