

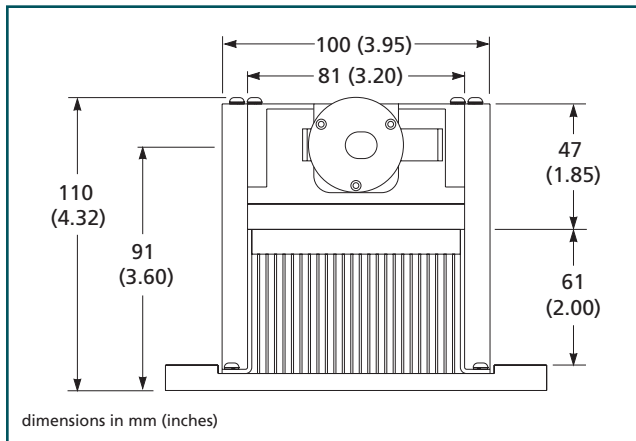


## High-Power DPSS Laser Systems

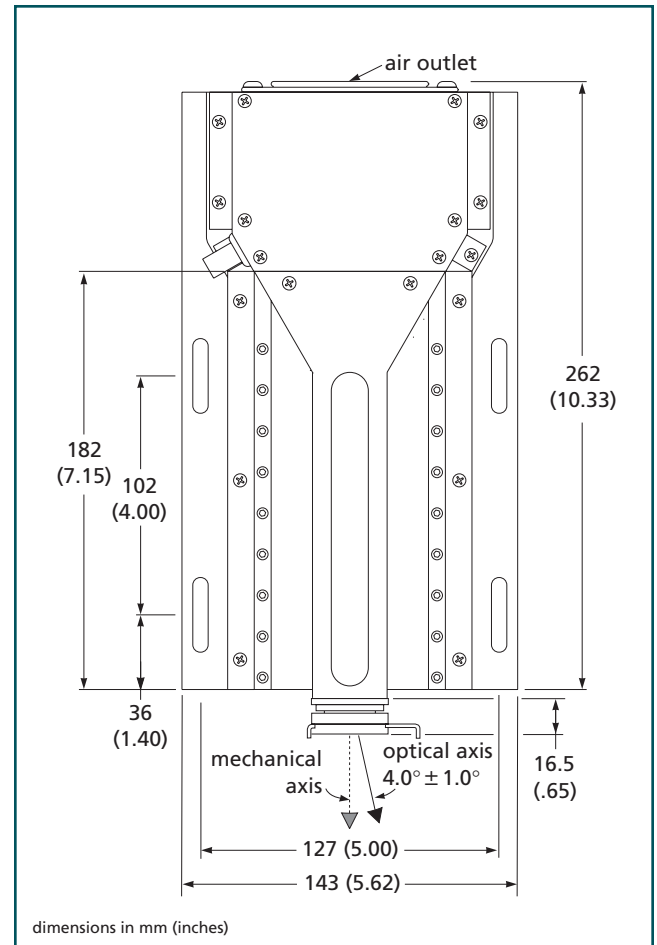
### 85 BLS Laser Systems

The 85 BLS series of blue DPSS lasers from CVI Melles Griot provides high power output at 457 nm in a compact, air-cooled package. 85 BLS-series lasers are ideal for use in semiconductor, biomedical, spectroscopic and interferometric applications as well as for laser display devices, photo plotters, PC-board, wafer, and surface inspection equipment, and particle characterization instrumentation. Their single longitudinal mode and long coherence length makes them an indispensable tool for holographic applications.

- Up to 300 mW at 457 nm
- Single transverse and longitudinal mode
- Coherence length up to 5 m
- Low power consumption
- RS-232 interface
- Automatic power control
- CDRH and CE compliant



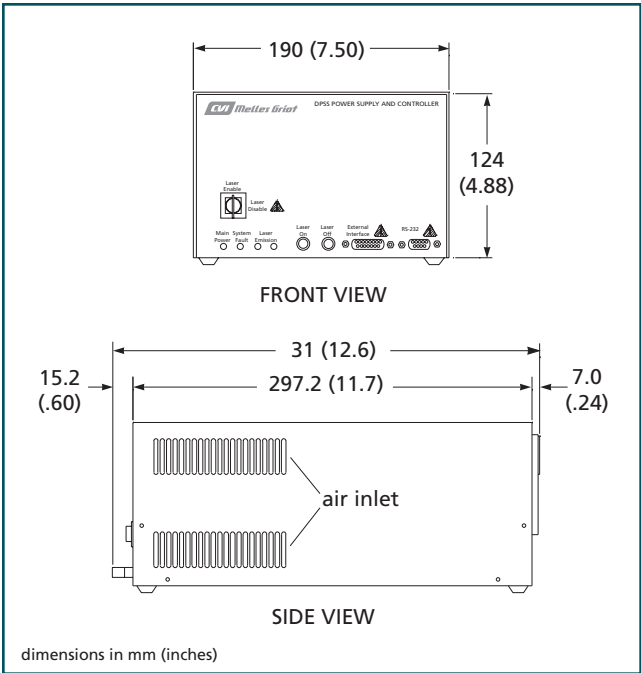
85 BLS-series laser, front view



85 BLS-series laser, top view

### 85 BLS Laser Systems

cw Output Power (mW)	Beam Dimension (1/e <sup>2</sup> )	Beam Shape	Beam Divergence (1/e <sup>2</sup> ) (mrad)	PART NUMBER
100	0.16	Round	<5.0	85 BLS 301
200	0.15 × 0.29	Elliptical (horizontal)	<5.0 × 2.5	85 BLS 305
300	0.15 × 0.29	Elliptical (horizontal)	<5.0 × 2.5	85 BLS 601



85 BLS-series laser power supply

SPECIFICATIONS: 85 BLS Laser Systems

<b>Beam Characteristics</b>	
Output Wavelength	457.5 ± 0.5 nm
<i>M</i> <sup>2</sup>	<1.2
Transverse Mode	Single
Longitudinal Mode	Single
Coherence Length	Up to 5 m (ACC mode)
Polarization	Linear (horizontal ± 5°) >100:1
Exit Angle	4° ± 1° (horizontal) 0° ± 1° (vertical)
<b>Stability Characteristics</b>	
Long-Term Power Drift	± 2.5% in APC Mode (22°C ± 2°C over 8 hrs)
Pointing Stability	<0.025 mrad at ambient ± 1°C <0.007 mrad with optional beam collimator
Amplitude Noise	<i>rms</i> <2% (20 Hz to 2 MHz)
<b>Operating Characteristics</b>	
Operating Mode	Automatic Current Control (ACC) Automatic Power Control (APC)
Warm-up Time	<5 minutes
Cooling	Forced air with heat sink
<b>Environmental Requirements</b>	
Temperature (ambient)	
<i>Operating</i>	+ 10°C to + 35°C
<i>Nonoperating</i>	– 10°C to + 60°C
Operating Humidity	0 to 95%, noncondensing
<b>Electrical Characteristics</b>	
Input Voltage	100–240 Vac ± 10%
Input Frequency	50–60 Hz
Input Power	150 W (typical)
<b>Weight</b>	
Laser Head	3.9 kg (8.6 lb)
Power Supply	3.7 kg (8.1 lb)
<b>Safety and Regulatory Compliance</b>	
CDRH Class	IIIb
IEC Class	3B
CE	Compliant

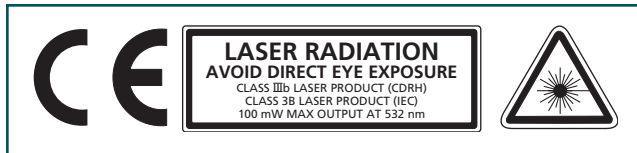


All CVI Melles Griot diode-pumped solid-state laser systems are designed, tested, and manufactured for compliance with applicable international and laser safety standards, including CDRH performance standard 21 CFR 1040 and European directives 89/336/EEC and 73/23/EEC.

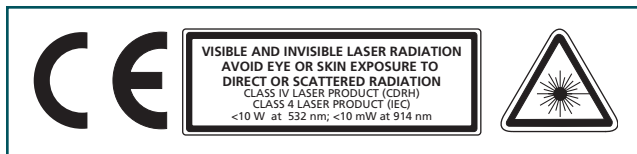
The labels below are attached, as indicated, to all complying product.



Compliance label for BCA-series DPSS laser systems operating at 473 nm



Compliance label for GCA- and GCB-series DPSS laser systems operating at 532 nm

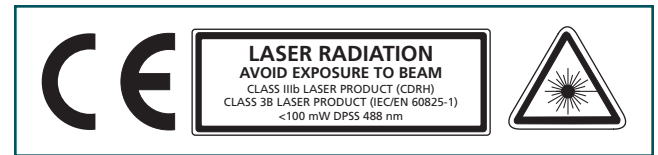


Compliance label for GHS-series DPSS laser systems operating at 532 nm

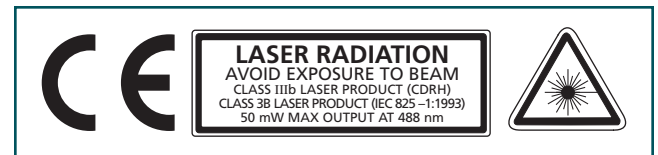


Compliance label for YCA-series DPSS laser systems operating at 561 nm

## Diode-Pumped Solid-State Laser Emission Compliance Labels



Compliance label for BCD-series DDD laser systems operating at 488 nm



Compliance label for BCF-series DDD laser systems operating at 488 nm



Compliance label for BLS-series DPSS laser systems operating at 457 nm



Compliance label for YCF-series DPSS laser systems operating at 561 nm