

Visible Laser Module (VLM™)

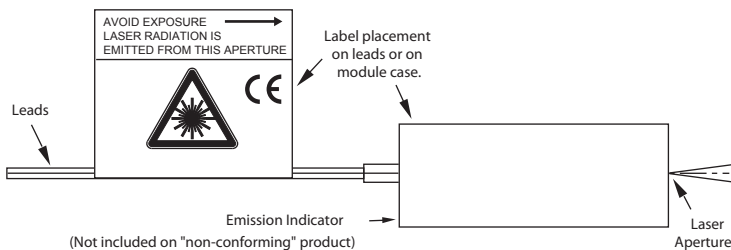


**ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES**



Safety Precautions:

1. This product is classified as a Class 2, Class 3R, or Class 3B laser according to CDRH/IEC standards. Reference attached label for exact classification.
2. Since a laser beam can be damaging to the eyes, DO NOT look into the laser aperture when the laser is in operation. The emission indicator (on conforming products only) shows when the laser is On.
3. Be aware that laser light can also be dangerous when reflected off a mirror-like surface.
4. For further safety information regarding lasers, refer to ANSI-Z1 36.1 STANDARD FOR THE SAFE USE OF LASERS, available from the Laser Institute of America, phone 407/380-1553.
5. CAUTION: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.



If the CDRH/IEC Label affixed to the laser contains the text "THIS PRODUCT DOES NOT COMPLY" then **NOTICE:** This product is designated for use solely as a component of an electronic product and therefore does not comply with the requirements of 21 CFR 1040.10 for complete laser products. Adequate instructions for safe installation of this laser product are provided in servicing information available from the complete laser product manufacturer under 21 CFR 1040.10(h)(2)(ii), and should be followed.

CE MARK



Applicable EEC Directives:
89/336, 92/31, 93/68
Applicable Standards:
Generic Emission EN 50081-1
Generic Immunity EN 50082-1

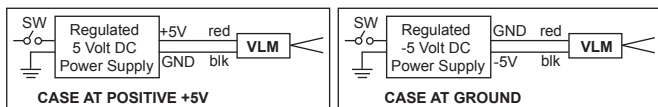
LABEL # 1127166AB	铅	汞	镉	六价铬	多溴联苯	多溴联苯醚
	Pb	Hg	Cd	Cr ⁶⁺	PBB	PBDE
	X	O	O	O	O	O

O=小于最高浓度值 X=大于最高浓度值



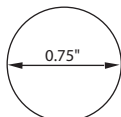
User Instructions:

1. For standard continuous-wave (CW) laser modules the electrical connection to the VLM is made through the red lead (+) (or the case of the module), and the black lead (-) (or the center solder bump on the back of the module). The module can be connected to a negative supply to offer a grounded case or a positive supply to offer a "hot" case, see figure below:



Note: If the module has 3 or more leads, please see separate instructions for electrical installation.

2. Recommended operating voltages for the VLM are as follows depending on the outside diameter of the module. The VLM runs cooler and more efficient at the lower voltage.



Industrial Housing
5VDC to 10 VDC



VLM2™
5VDC to 10 VDC



VLM3™
3VDC to 6 VDC

3. **WARNING: DO NOT** exceed maximum recommended operating voltage. When installing the VLM, **DO NOT** connect the VLM to an active "hot" supply. Only connect the red and black leads when the power source is disabled. **DO NOT** disconnect the VLM from an active power supply. First disable the power supply then disconnect the leads.
4. **Power Supplies:** The VLM may be operated by battery or line supplies. To avoid warranty questions, Coherent recommends that a regulator, typically a 7805 or equivalent, be connected between the power supply and the VLM to filter out any transients. If a battery is used, it is recommended that the battery be operated through a voltage regulator with filters. If a switch is used to turn the VLM "on" and "off", the switch should be placed between the power source and the regulator.
5. **WARNING:** The VLM is not designed to run in "free air". Heat sinking is required. The VLM must not be thermally isolated (insulated) from a heat sink. The case temperature is not to exceed 40° Celsius.

Technical Support

In the U.S.:

Should you experience any difficulties with your laser or need technical information, please visit our web site www.Coherent.com. Additional support can be obtained by contacting our technical Support Hotline at 800-367-7890 (408-764-4567 outside the U.S.) or E-mail (cig.tech.services@coherent.com).

Outside the U.S.

If you are located outside the U.S. visit our web site for technical assistance or contact, by phone, our local Service representative. Representative phone numbers and addresses can be found on the Coherent web site, www.Coherent.com.

Note: When returning product to Coherent, the product label showing the part number and date must be included with the module.