

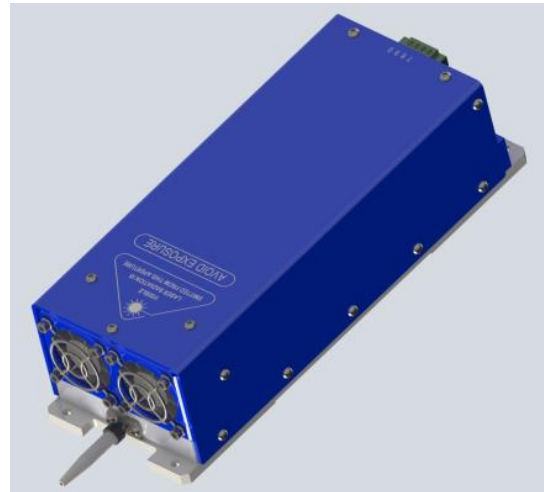
High brightness air-cooled Fiber-coupled Diode Blue Laser

Features

- Direct diode laser
- High power conversion efficiency
- Compact design
- TEC temperature regulated
- Temperature sensors
- Forced air cooling

Applications

- Materials processing
- Micro soldering
- Laser display / projector
- 3D Printing
- Scientific applications



Technical Specifications

Part Number GP-450-100-13-AC

Optical Specifications¹

CW Output Power ^{1,2}	13	W
Center Wavelength	450	nm
Center Wavelength Tolerance	±10	nm
Spectral Width (FWHM)	<15	nm
Beam Divergence	0.22	NA
Beam Diameter at fiber tip	105	µm

Electrical Characteristics (typical)

Power Conversion Efficiency	>18	%
Threshold Current	0.4-0.6	A
Operating Current @ 13W	2.4-3.0	A
Operating Voltage @ 13W	28-30	V
Recommended Hookup Wire	14 or heavier	AWG
	2.0 or heavier	mm ²
TEC Current @ full power	6	A
TEC Voltage @ full power	28.8	V
TEC Wire	12 or heavier	AWG
	3.3 or heavier	mm ²

Thermal Specifications

TEC set temperature	+20 to +25	°C
Environmental Temperature ³	+5 to +40	°C
Storage Temperature ³	-40 to +80	°C

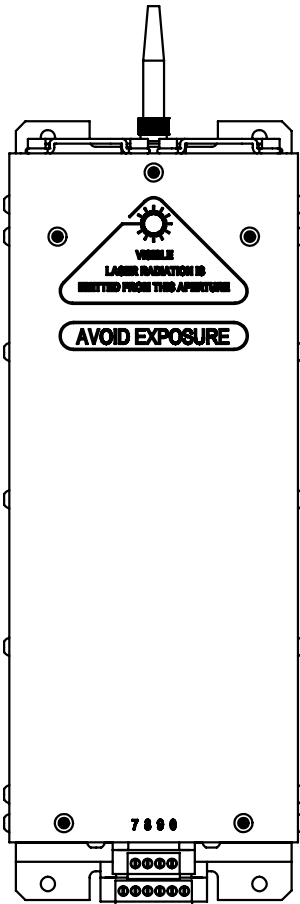
Mechanical Specifications

Dimensions (LxWxH)	243 x 86 x 66	mm
	9.57 x 3.39 x 2.6	inch
Weight	1.6	kg
Fiber core diameter	105 or larger	µm
Fiber numeric aperture	0.22 or larger	NA
Fiber Connector	SMA-905	

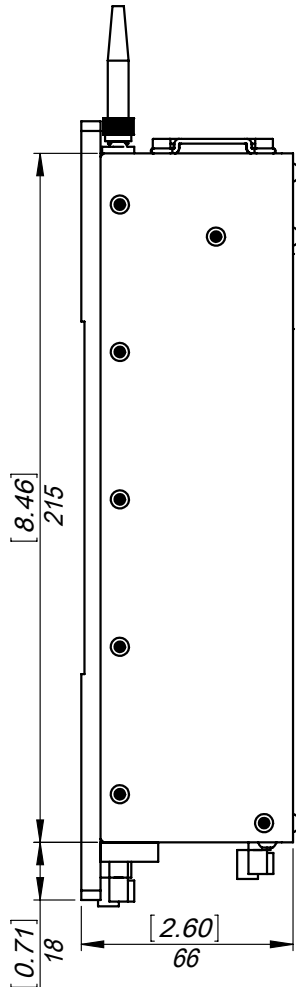
1. All values measured at TEC temperature and environmental temperature = 25°C.
2. Reduced lifetime if used above normal operation temperature
3. A non-condensing environment is required

Packaging Dimensions

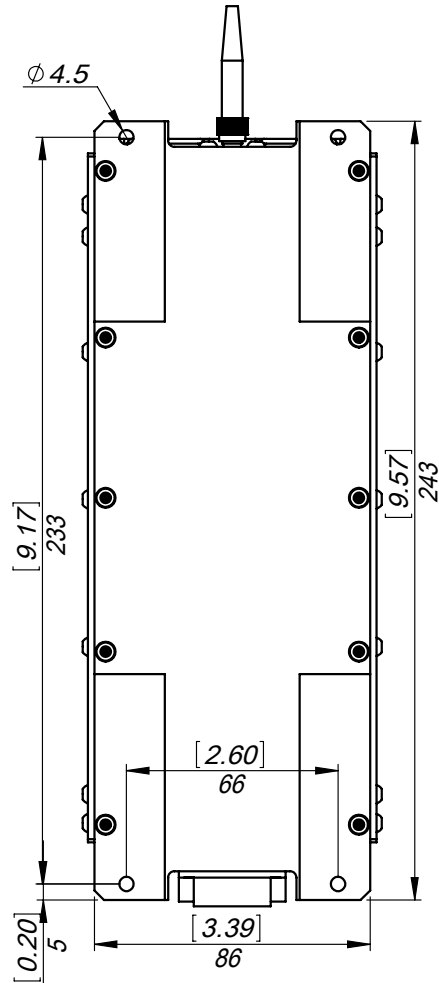
Top View



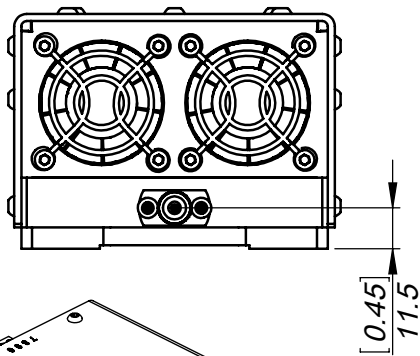
Side View



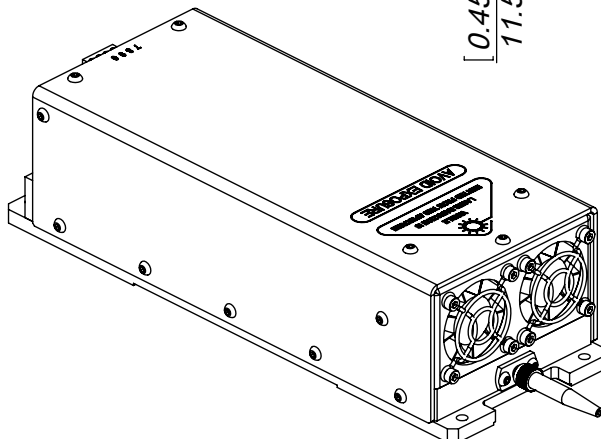
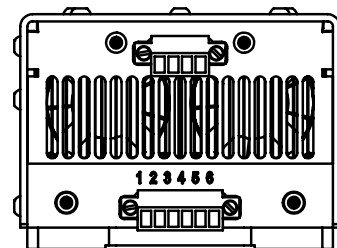
Bottom View



Front View



Back View



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Genesee Photonics follows a policy of continuous product improvement. Specifications are subject to change without notice. We offer a limited warranty for all laser products.



LASER RADIATION
 AVOID EYE OR SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION
 CLASS 4 LASER PRODUCT