

High Brightness Air-cooled Fiber-coupled Blue Diode Laser Module

FACH-450-13W-FC105-AC

Features:

- CW Output Power 13W
- Fiber Core Diameter 105 μ m / NA 0.22
- Direct Diode Laser
- Compact Design
- TEC Temperature Regulated
- Temperature Sensors
- Forced Air Cooling

Applications:

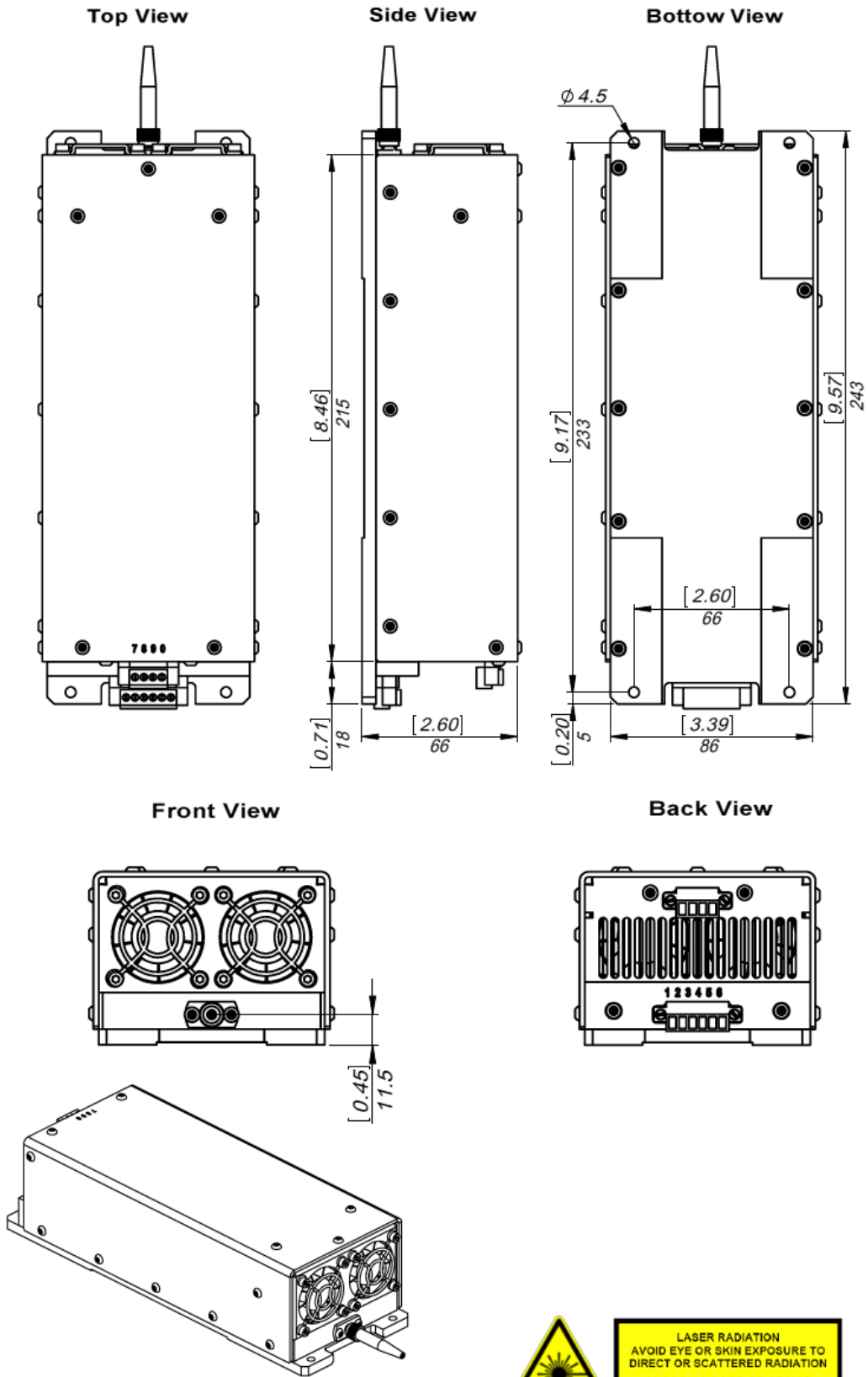
- Material Processing
- Micro-Soldering
- Laser Display / Projector
- 3D Printing
- Scientific Applications

Technical Specifications

Optical Specifications	
CW Output Power (W)	13
Center Wavelength λ (nm)	450
Center Wavelength Tolerance $\Delta\lambda$ (nm)	± 10
Spectral Width (FWHM) (nm)	<15
Fiber Specifications	
Fiber Core (μm)	105
Numerical Aperture (NA)	0.22
Connector	SMA-905
Electrical Specifications (typical)	
Threshold Current (A)	0.4 - 0.6
Operation Current @ 13W (A)	2.4 - 3.0
Operation Voltage @ 13W (V)	28 - 30
Conversion Efficiency (%)	>18
Recommended Cable Cross-Section	$\geq 2 \text{ mm}^2$ (\geq AWG 14)
TEC Current @ 13W (A)	6
TEC Voltage @ 13W (V)	28.8
Recommended Cable Cross-Section	$\geq 3.3 \text{ mm}^2$ (\geq AWG 12)
Thermal Specifications	
TEC Set Temperature ($^{\circ}\text{C}$)	20 - 25
Environmental Temperature ($^{\circ}\text{C}$)	5 - 40
Storage Temperature ($^{\circ}\text{C}$)	-40 - 80

Mechanical Specifications	
Laser Head Dimensions (mm) (Fiber and connector not included)	243 x 86 x 66
Weight (kg)	1.6

Package Dimensions (mm)



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