

ZMI 7702 Laser Head

P/N's	POWER	BEAM DIAMETER	FEET
8070-0102-01	>400 μ W	6 mm	narrow
8070-0102-02	>400 μ W	3 mm	narrow
8070-0102-03	>400 μ W	6 mm	wide
8070-0102-04	>400 μ W	3 mm	wide
8070-0102-05	>525 μ W	6 mm	narrow
8070-0102-06	>525 μ W	3 mm	narrow

PHYSICAL CHARACTERISTICS	
Dimensions	See Figure
Weight	12 lb (5.5 Kg)
Materials	Aluminum, narrow feet- Ultem 2400
Nom. Cable Clearance	5.3 in. (135 mm)

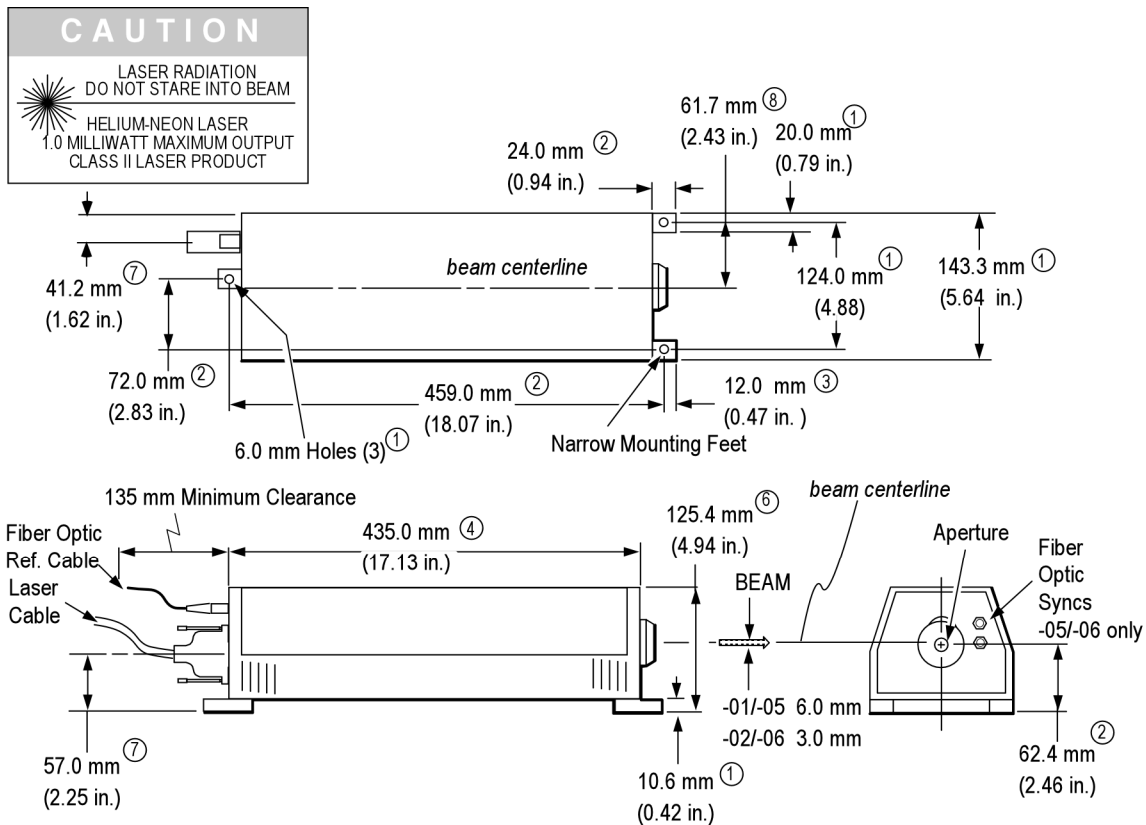
ELECTRICAL	
Power Requirements (max)	+ 15 VDC \pm 0.5V @ 2.1 A - 15 VDC \pm 0.5V @ 1.2 A
Power Dissipation (max)	39 watts during operation 50 watts peak during warm-up
Wavelength Stability Time	<10 minutes, typical

LASER BEAM CHARACTERISTICS	
Type	Helium-Neon, cw, two-frequency, linearly polarized
Min. Power Output	See P/N section

LASER BEAM CHARACTERISTICS CONTINUED	
Nominal Vacuum Wavelength	F1: 632.991501 nm (vertical polarization) F2: 632.991528 nm (horizontal polarization)
Beam Diameter	See P/N section
Usable Beam Length	6 mm beam: 25 m 3 mm beam: 2 m
Frequency Difference	20 MHz \pm 1600 Hz
Time from turn-on to laser light	<10 sec typical, 70 sec maximum
Beam Pointing Stability	<0.1 arc sec/ $^{\circ}$ C
Polarization Orthogonality	90 $^{\circ}$ \pm 0.5 $^{\circ}$
Vacuum Wavelength Lifetime Accuracy	\pm 0.1 ppm
Vacuum Wavelength Stability	0.01 ppm/24 hour
DHHS Laser Safety Classification	Class II, conforms to NCDRH regulations

ENVIRONMENTAL	
Operating Temperature	10 to 30 $^{\circ}$ C
Non-operating Temperature	-40 to 75 $^{\circ}$ C
Operating Humidity	0 to 90%, noncondensing
Non-operating Humidity	0 to 90%, noncondensing
Shock (non-operational)	11 milliseconds 40 G shock on each of three orthogonal axes

Configurations 01/02/05/06



Dimensions shown in millimeters and inches

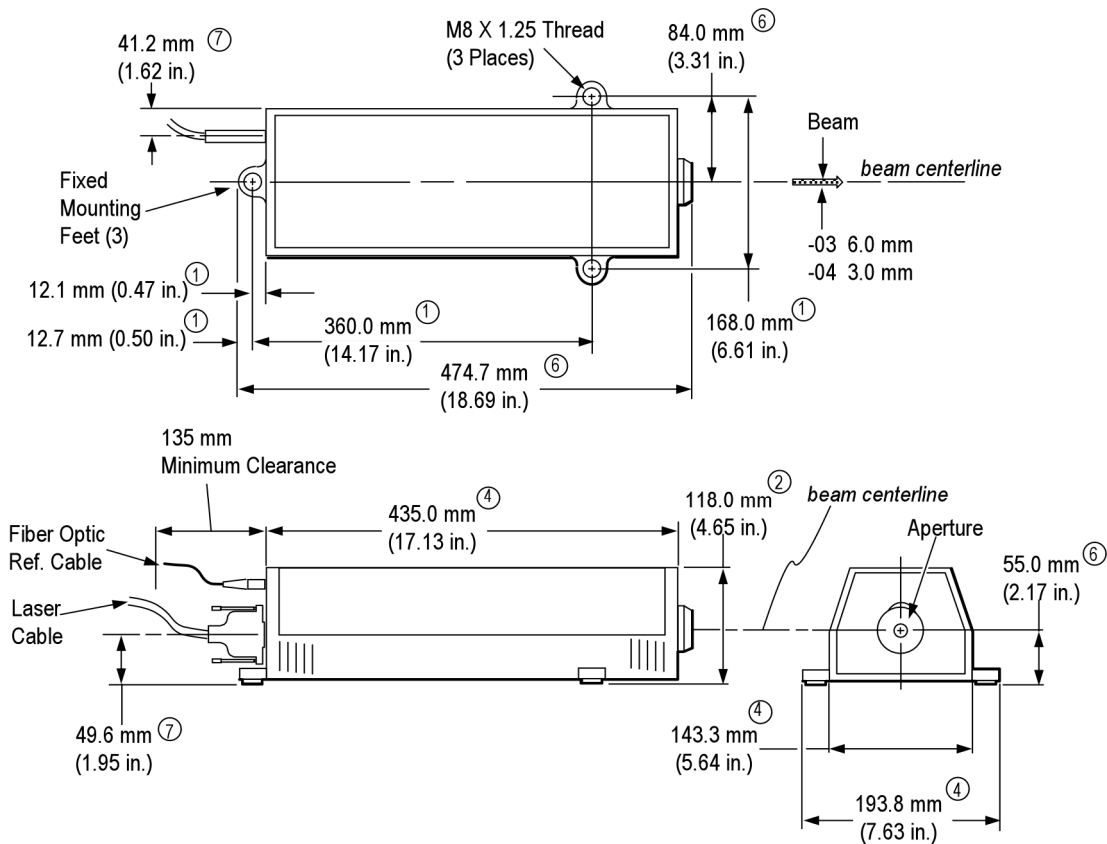
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Configurations 03/04

CAUTION

LASER RADIATION
DO NOT STARE INTO BEAM

HELIUM-NEON LASER
1.0 MILLIWATT MAXIMUM OUTPUT
CLASS II LASER PRODUCT



Dimensions shown in millimeters and inches