

ZMI 7705 Laser Head

P/N's ⁽¹⁾

8070-0902-01	>250 μ w power output
8070-0902-02	>350 μ w power output
8070-0902-03	>250 μ w power output
8070-0902-04	>350 μ w power output

PHYSICAL CHARACTERISTICS

Dimensions	See Figure
Weight	2.3 lb (1.0 Kg)
Materials	Aluminum, ABS
Nominal Cable Clearance	4 in. (102 mm)

LASER BEAM CHARACTERISTICS

Type	Helium-Neon, cw, two-frequency, linearly polarized
Minimum Beam Power Output	See P/N section
Nominal Vacuum Wavelength	632.992 nm
Beam Diameter ($1/e^2$):	4.1 \pm 0.3 mm (0.16 in.)
Frequency Difference	3.6 MHz \pm 0.3 MHz
Time from turn-on to laser light	< 30 sec typical
Beam Pointing Stability	0.2 milliradians, cold to hot
Polarization State Deviation from Orthogonality	<1°

LASER BEAM CHARACTERISTICS continued

Vacuum Wavelength Lifetime Accuracy	\pm 0.2 ppm
Vacuum Wavelength Stability	0.01 ppm/1 hour 0.02 ppm/24 hr
DHHS Laser Safety Classification	Class II, conforms to NCDRH regulations

ENVIRONMENTAL

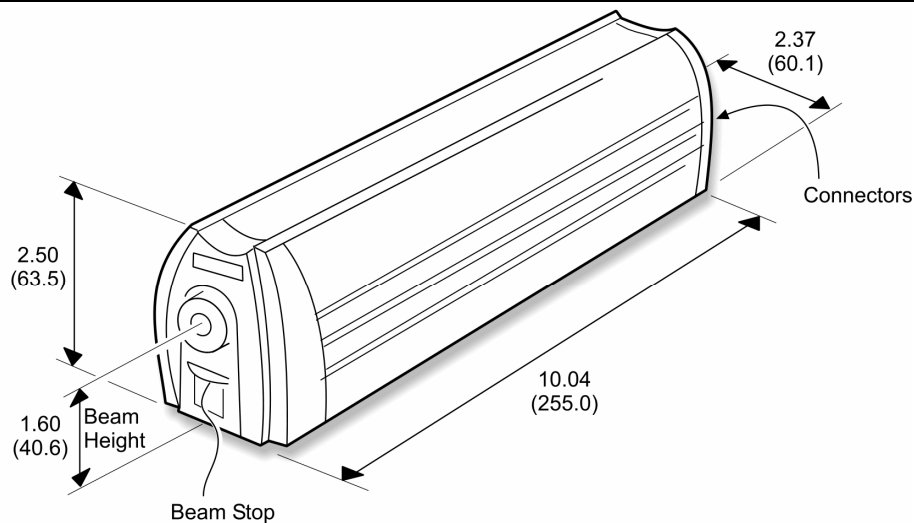
Operating Temperature	10 to 30°C
Non-operating Temperature	-40 to 75°C
Operating Humidity	0 to 90%, noncondensing
Non-operating Humidity	0 to 90%, noncondensing
Shock (non-operational)	11 milliseconds 40 G shock on each of three orthogonal axes

ELECTRICAL

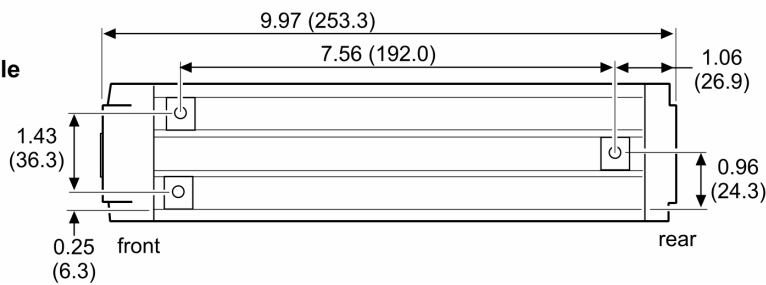
Power Requirements (max)	+ 15 VDC \pm 0.5V @ 0.6 A
Power Dissipation (max)	7 watts during operation @20°C 9 watts peak during warm-up

Wavelength Stability Time \leq 15 minutes

1. Versions -01 and -02 for ZMI 510; versions -03 and -04 for ZMI 501 or ZMI 501A.



Bottom View Mounting Hole Dimensions



Dimensions shown in inches and millimeters