ZMI 7724 Laser Module

P/N's	Description
8070-0277-01	Laser module connects to up to 2 delivery modules

Physical Characteristics	
Dimensions	See Figure
Weight	5.5 Kg
Nom. Cable Clearance	120 mm
Cooling Connectors	(2) G 1/8 ISO 228/1
Materials	Laser Module castings - Aluminum, cooling tubes - 304L Stainless Steel, cooling connectors - 316 Stainless Steel

Electrical	
Power Requirements (max)	+15 VDC ±0.5V @ 2.1 A -15 VDC ±0.5V @ 1.4 A -15 VDC inrush max 5 A for 20 msec
Heat Dissipation not removed by coolant	< 5 W

Laser Characteristics	
Type	Helium-Neon, continuous wave, heterodyne
Output Power	≥ 1.42 mW per channel
Time from turn-on to wavelength stability	10 minutes typical @ 21.5 ± 1.5°C
Time from turn-on to laser light	2 minutes max.
Mean Vacuum Wavelength	632.99070 nm Left channel: mean – 0.00044 nm Right channel: mean + 0.00044 nm
Mean Vacuum Wavelength, unit-to-unit variability	±0.0005 nm
Wavelength difference between channels, unit-to-unit variability	±0.0001 nm

Laser Characteristics continued	
Vacuum Wavelength Stability (3σ)	± 10 ppb over laser lifetime, ± 0.5 ppb over 1 hour
DHHS Laser Safety Classification	Class IIIa, conforms to NCDRH regulations
IEC Laser Safety Classification	3R

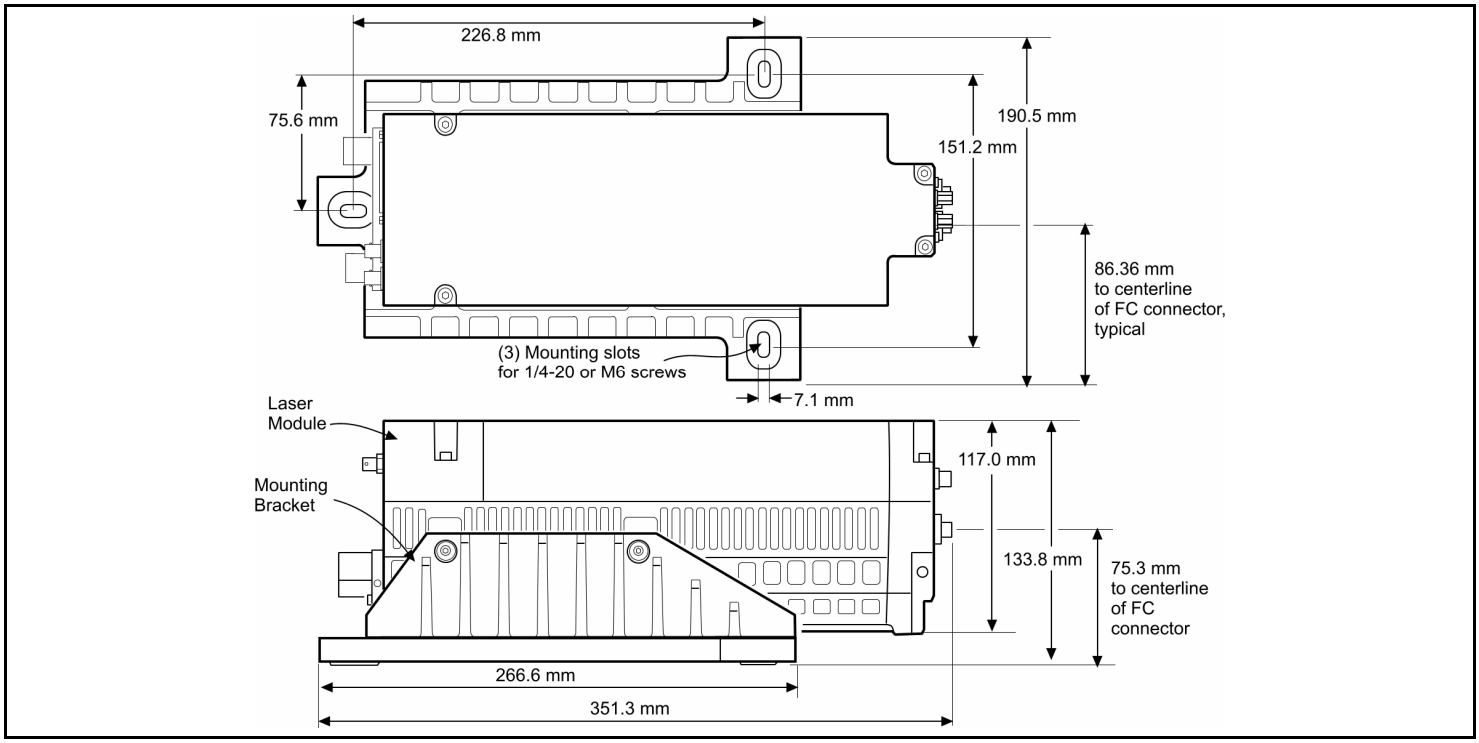
Environmental Operating Conditions	
Operating Temperature	20 to 25°C
Temperature Variation in User Process	±1°C
Maximum Rate of Ambient Temperature Change	2°C per hour
Humidity	30 to 70% (non-condensing)
Atmospheric Pressure	700 to 1150 hPa
External Magnetic Field	< 0.5 mT

Non-Operating Conditions	
Temperature Range	-20 to 60°C
Humidity	0 to 70% (non-condensing)
Shock	11 milliseconds 40G shock on each of three orthogonal axes (in ZYGO shipping container)

Cooling

Active cooling with a user-supplied chiller is required to meet the specifications on this page.

Coolant Type	compatible with ethylene propylene seals
Coolant Temperature Setpoint	20 to 23° C ± 0.1° C
Coolant Flow Rate	>0.5 and <4 liters per minute
Maximum Allowable Coolant Pressure	690 kPa (100 psi)



Zygo Corporation
Laurel Brook Road
Middlefield, CT 06455

Phone: 860-347-8506
Email: inquire@zygo.com
Website: www.zygo.com

SS-0081 09/09