

Specification for frequency doubled carbon dioxide laser (Doubled CO₂). Specifications are critical to low cost, efficient integration into Optical Sciences division, Infrared countermeasure laboratory.

Physical dimensions

Laser head size	< 36inx8inx8in (LxWxH)
Cooling	water cooled heat load <1500W flow rate >1.5gallons per minute operating temperature range 15-30dec C

Operating Environment

Temperature 15-45 degC
<6500ft altitude

System Specification

Format	pulsed
Pulse repetition frequency	0 to 100Khz
Pulse width	<20ns
Modulation control	TTL up to 100kHz internally variable and externally controllable
Wavelength	4.6-5.4 micron selectable
Average power@4.6micron	>1.5watts
Power drift after 30min warmup	<15% over 30minutes
Peak power @9.3micron	>1KW
Beam quality	M squared<1.5
Beam diameter(1/esquared)	< 2.5mm
Polarization	fixed linear
divergence @4.6micron	<4mradian
Prime power	200-240VAC, 50-60Hz