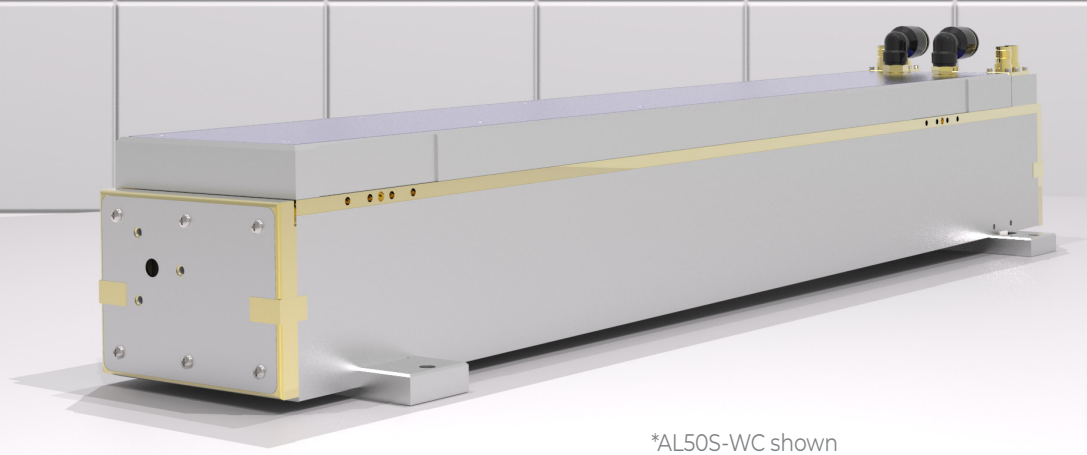
DATASHEET

AL50SLT-9.3µm-WCCL



*AL50S-WC shown

Laser Power

Wavelength	9.3 µm
CW Power	40 W
Peak Power	40 W
Power Stability[1]	± 1 %

Beam Characteristics

Beam Waist Diameter	2.4mm
Waist Location	Output Coupler
Mode Quality	$M^2 \leq 1.2^2$
Full Divergence Angle	5.5 mrad
Rise and Fall time	200 µs
Polarization	≥50:1 Linear Vertical

Pulse Width Modulation Parameters

Duty Cycle	(0-100) %
Pulse Repetition Frequency	(0-100) kHz

DC Power Requirements

RF Driver	28 V
Line Tracker	12 V

Diementions & Weight

Laser Weight	15.3 kg
Dimensions L x W x H	(78.8 x 10.0 x 12.8) cm
RF Driver Weight	5.2 kg

Heat & Cooling

Heat Dissipation	≤ 750W
Cooling Requirement	Water Cooled Closed Loop
Working Temperature	(5 - 40) °C

Water Cooling

Min Flow Rate	3.8 LPM (1GPM)
Recommended Flow Rate	9.5 LPM (2.5 GPM)
Max Pressure	10bar (150 psi)
Required Chiller Stability	± 0.1 °C
Storage Temp Range	(0 - 50) °C

Notes

Power Stability calculated in CW at thermal equilibrium

$$\pm \frac{P_{max} - P_{min}}{P_{max} + P_{min}}$$

Beam specifications measured at: $\frac{1}{e^2}$

All measurements taken at the strongest line.. All are specifications are subject to change without notice.
[1]After 45 minute warm-up. Line Tracker engaged.
[2]After filtering of higher-order ring mode.

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