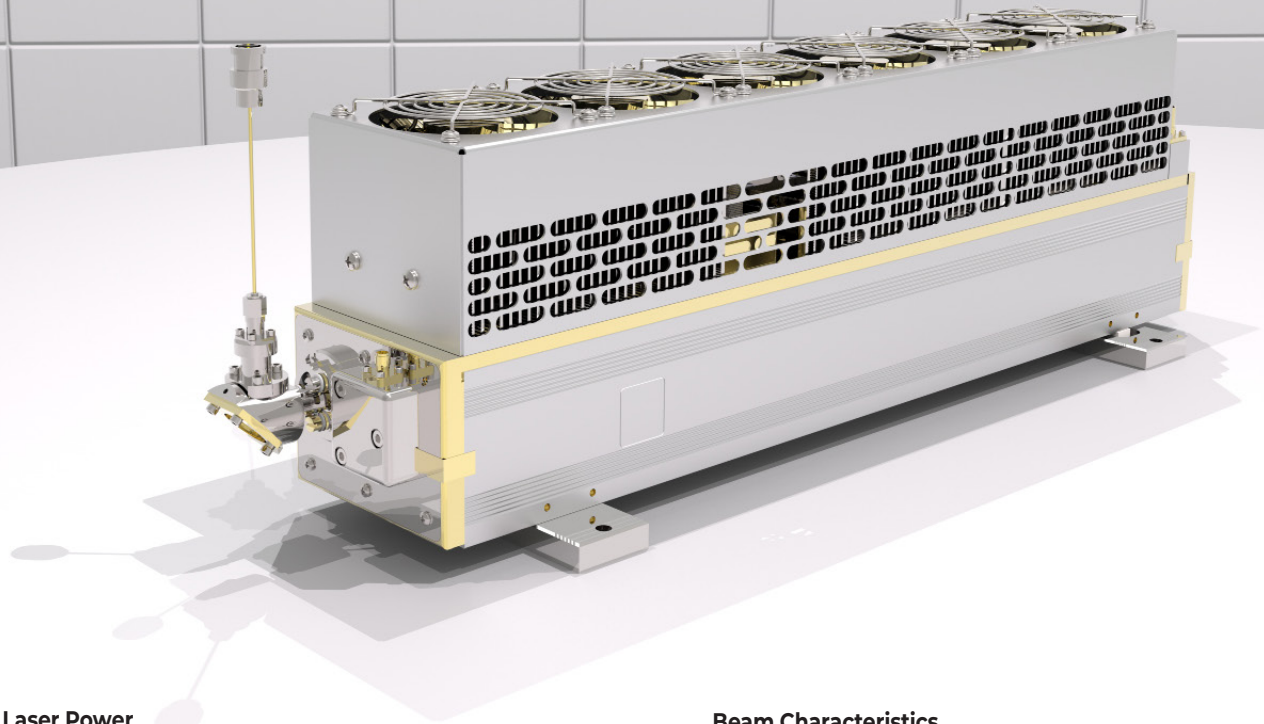


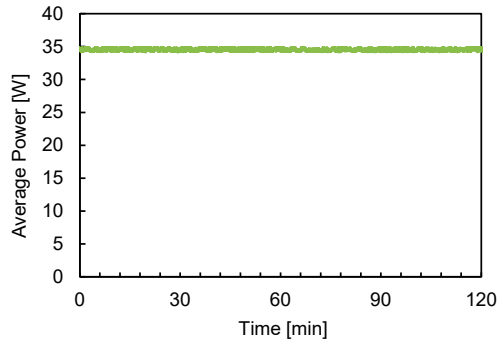
# AL30ST FCCL



### Laser Power

Wavelength	~ 10.6 $\mu\text{m}$
CW Power	30 W
Power Stability	$\pm 1\%$
Duty Cycle	0 - 100 %
Pulse Repetition Frequency	0 - 100 kHz
Rise and Fall Time	200 $\mu\text{s}$
Peak Power	30 W

Typical performance:



### Dimensions & Weight

Laser Weight	20.5 lbs
Dimensions L x W x H	23.5 x 4 x 6.5 in
RF Driver Weight	7.0 lbs

### Beam Characteristics

Beam Waist Diameter	2.4 mm
Waist Location	Output Coupler
Mode Quality	$M^2 \leq 1.1$
Full Divergence Angle	5.5 mrad
Polarization	$\geq 20:1$ Linear Vertical

### Heat & Cooling

Heat Dissipation	$\leq 600$ W
Cooling Requirement	Fan Cooled Closed Loop
Working Temperature	5 - 40 $^{\circ}\text{C}$ (non-condensing)
Storage Temp. Range	5 - 50 $^{\circ}\text{C}$ (non-condensing)

### DC Power Requirements

Laser RF Driver (U   I)	36 V   16.5 A
Temperature Controller	12 V
Line Tracker	12 V

### Notes

Power Stability calculated by:  $\pm \frac{P_{max} - P_{min}}{P_{max} + P_{min}}$

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

*Average or pulsed power may exceed listed value. All specifications are measured at the strongest line and are subject to change without notice. Stability measured after 45 minute warm-up to allow laser head to reach thermal equilibrium.*

