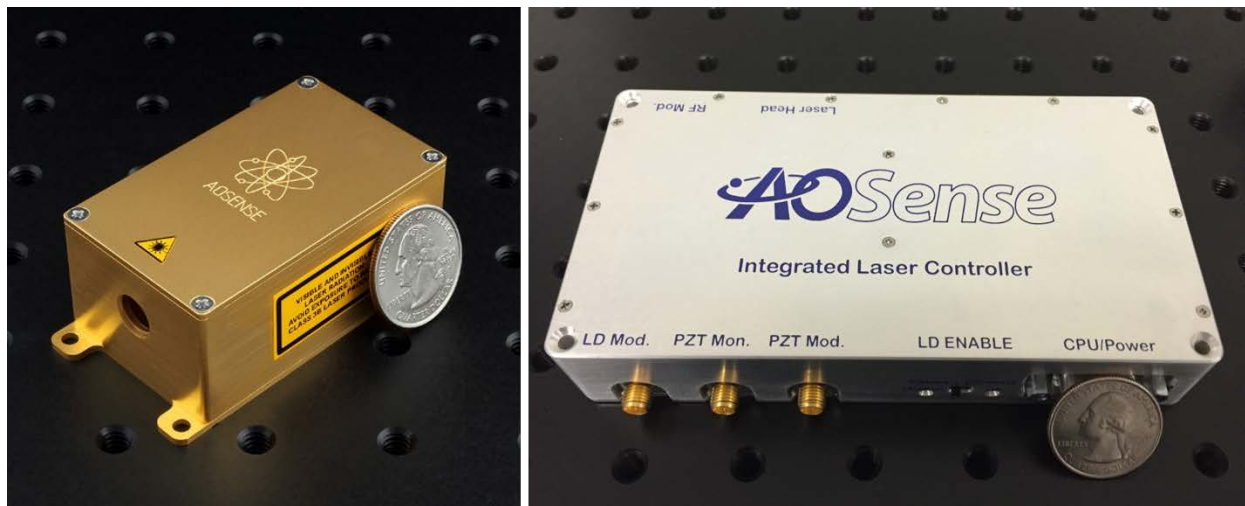


External Cavity Diode Lasers and Integrated Laser Controllers for AMO applications



Features:

- Semi-monolithic cat's-eye design for stability, environmental immunity
- Factory-set wavelengths available: 461, 650-980 nm (custom λ 's ok)
- Blue-UV models in development for 2017 (395-493 nm)
- No user alignment required
- Narrow linewidth of 30-300 kHz (λ -dependent)
- Circularized beam option for some wavelengths
- Injection locking configurations available
- Integrated control solution for laser current, PZT, and temperature
- Ultra-low noise electronics with digital control
- Easy to use software control with provided GUI or virtual COM port
- Multi-laser operation with single interface
- Compact laser head (3"x1.5"x1.1") and controller (5"x2.9"x0.95")

ECDL Model No.	AOS-IF-ECDL-λ
Dimensions (LxWxH), inches	Compact: 3"x1.5"x1.1"
Wavelength (factory tuned at the GHz level)	650-980 nm
Output power	20-80 mW
Linewidth	<200 kHz typical
Beam circularization option	Select Models
Mode-hop-free tuning range (piezo + FFWD current)	>10 GHz
Mode-hop-free tuning range (piezo only)	2-5 GHz typical
Tuning range (current + piezo + temperature)	30-100 GHz
Memory (serial number, safety limits, settings)	NVRAM, in laser head

ECDL controller Model No.	AOS-ILC-P-XXX
Dimensions (LxWxH)	Compact: 5.4"x2.9"x0.95"
Current range	100 mA/200 mA/250 mA
Current resolution	10 μA
Laser current noise	100 pA/√Hz
Laser current mod DC coupled	DC-10 MHz
Laser current mod AC coupled	0.5-50 MHz
PZT range	150 V
PZT noise	< 500 nV/√Hz
PZT modulation	DC-5 kHz
PZT/Current FFWD	Yes, variable gain
TEC range	15-40 C
Temperature resolution	1 mK
Control interface	USB
Memory (serial number, safety limits, operation)	NVRAM, in controller
Power supply	+5 V DC
Power consumption	6 W typical (10 W start)

Software Interface	
Multi-laser support	Yes, up to 10
Auto limits	Yes
Laser control	Thermal, LD current, PZT
Detail settings (TEC PID, FFWD gain, port enable)	Yes
Data logging	plots and csv export
Application Programming Interface (API)	Yes, via virtual COM port
GUI operating system	W7, W8, W10