

AZUR LIGHT SYSTEMS



"A NEW GENERATION OF FIBER LASERS"

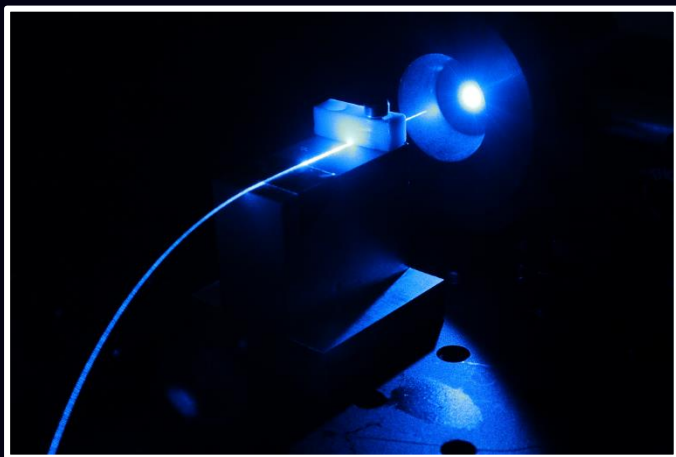
ALS-VISIBLE
488 - 515 - 532 nm
Up to 10W

PRACTICAL

- ✓ Fiber based architecture
- ✓ "Coolerless" laser head
- ✓ Maintenance free - long life
- ✓ Compact design - OEM version available
- ✓ Low power consumption

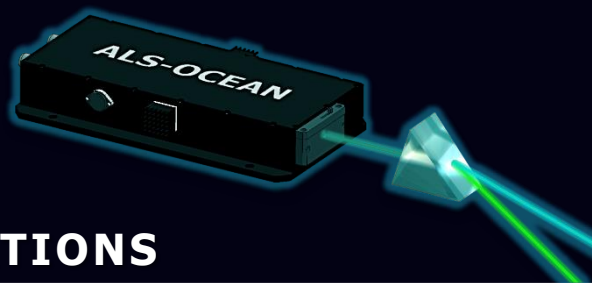
TECHNICAL

- ✓ Ideal drop-in replacement for Argon lasers
- ✓ CW emission - TEM00 mode
- ✓ Single frequency version
- ✓ Ultra-low noise
- ✓ Excellent pointing and power stability



ALS-OCEAN

A MULTI-WAVELENGTH PLATFORM
FOR ARGON LASER
DROP-IN REPLACEMENT
488/515 NM



APPLICATIONS

- ✓ Atom trapping and laser cooling
- ✓ Bio-photonics
- ✓ Spectroscopy (Raman, visible...)
- ✓ Super-resolution microscopy (STED-CW, GSD...)
- ✓ Optical pumping (Ti-Sa, crystals...)
- ✓ Holography
- ✓ Industrial control and measurement
- ✓ High power Argon laser replacement
- ✓ Laser Doppler Velocimetry
- ✓ Fluid dynamics measurement

www.azurlight-systems.com

SPECIFICATIONS

	Specifications		Unit
Wavelengths ⁽¹⁾	488	515 or 532	nm
Output power	0.5, 1, 2, ...	0.5, 1, 2,..., 10	W
Beam quality	M ² < 1.1		-
Spatial mode	TEM00		-
Spectral width - single frequency ⁽²⁾ - narrow bandwidth	< 200 kHz < 50 pm		- -
Power stability	< ± 0.2 % (short term) < ± 0.3 % (over 8 hours)		- -
Noise [100Hz-10MHz] RMS: - single frequency - narrow bandwidth	< 0.05 % < 0.2 %		- -
Frequency stability ⁽³⁾	< 0.1		pm
Pointing stability	< ± 0.5		µrad/°C
Output polarisation	Polarised > 99:1		-
Output	Single mode PM fiber to laser head with free space output. Options: power splitting / fiber coupling		-
Laser control	Potentiometer, Touch screen, Analog IN, USB		-
Supply requirements	90-240V/50-60Hz		-
Electrical power consumption	200<...<500		W
Cooling: - Laser rack - Laser head	Air cooled Cooler-less laser head. No air, no water for a better stability		- -
Dimensions: ⁽⁴⁾ - Laser rack - Laser head	480*460*130 275*120*50		mm mm

(1): Other wavelengths available on request.

(2): Linewidth reduction down to < 10 kHz available as an option with an external seeder rack.

(3): For single frequency version only. Measured over 8 hours and temperature variation < 3°C.

(4): Standard dimensions. Others dimensions available for OEM.

Azur Light Systems (ALS) develops, manufactures and commercialises fiber laser technology at new wavelengths for scientific, industrial and bio-medical applications. As the company name suggests, this new fiber laser technology enables **high power emission in the blue spectral range**, representing a veritable breakthrough in the laser market, and offering many advantages in terms of stability, robustness and ease of integration.



Combining the blue and green wavelengths, ALS has developed **the new ALS-OCEAN platform** – this product offers, for the first time, **equivalent power and wavelengths to existing high power Argon lasers** in a compact and stable solid state format. Flexible and powerful, ALS-OCEAN lasers can be used as a straight-forward drop-in replacement to an existing Argon laser, with the added benefit of all air cooling and standard electrical power supply. The laser head is also entirely heat free and cooler-less, avoiding instability from an air or water cooling.

