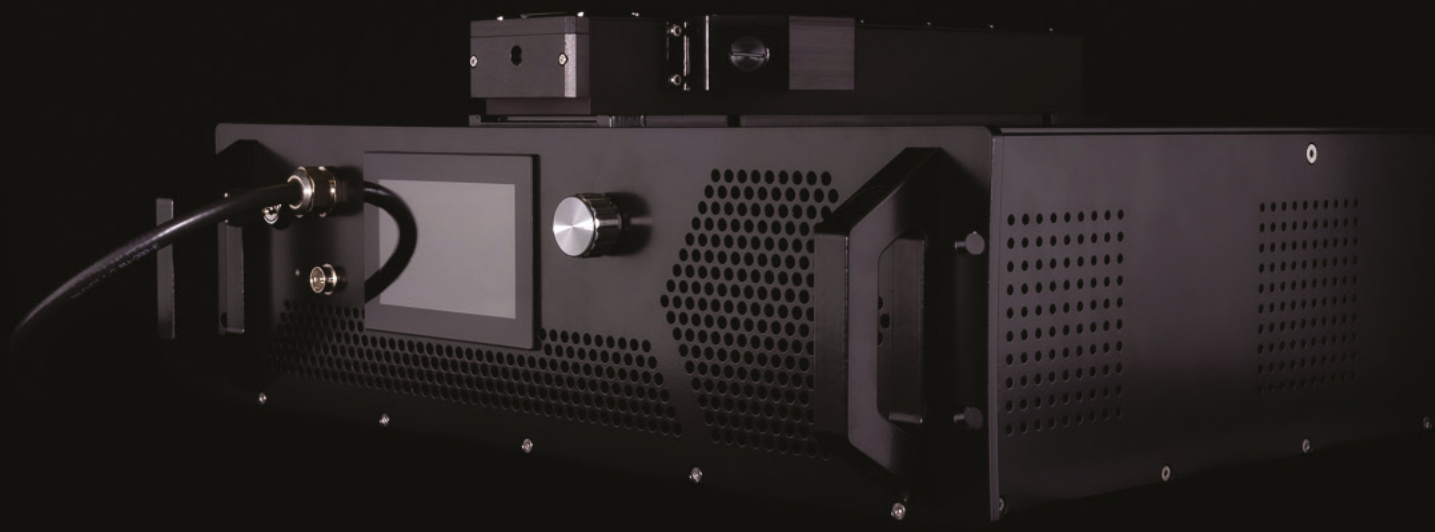
AZURLIGHT
SYSTEMS



EXPERIENCE THE EXTREME

CW FIBER LASERS & AMPLIFIERS

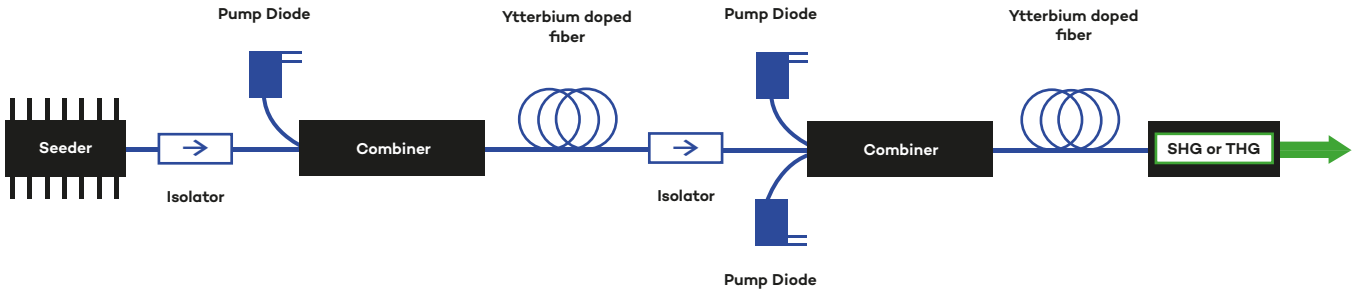
Visible series

488 nm - 515 nm - 532 nm

Azurlight Systems designs and manufactures high performances fiber lasers and amplifiers for industrial and scientific applications. Its innovative and patented technology represents a real breakthrough on the laser market especially over other solid-state technologies. It offers many advantages in terms of stability, robustness and ease of integration and is the laser of choice for your application.

One of our core values is the technical proximity with our client. We intend to provide deep understanding of our products performances, architecture and potential customization to the application. Our staff is available to openly discuss this.

MOPA Technology



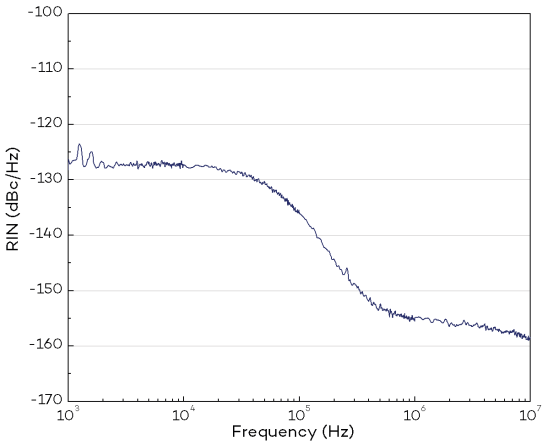
Features

- Single frequency
- Single mode
- Ultra-low noise
- Excellent pointing stability
- Maintenance free – long life

Applications

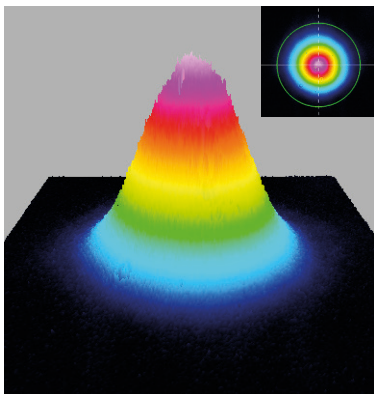
- Atomic & Molecular Physics
- High-Performances Instrumentation
- Argon Laser Replacement
- Holography
- Laser Doppler Velocimetry
- Interferometry
- High-Brightness Laser Pumping

Performances



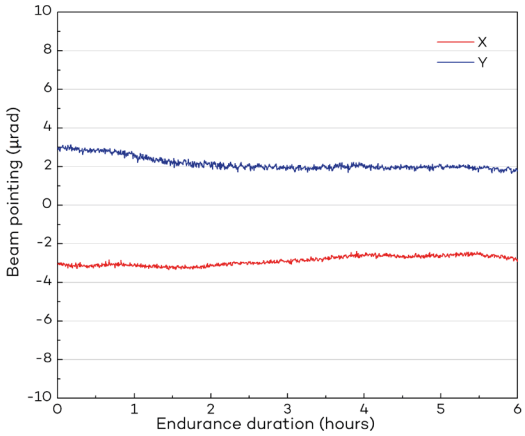
RELATIVE INTENSITY NOISE

RIN typical of a visible laser for a constant current mode of operation.
RMS (100 Hz – 10 MHz) : 0.015%



SINGLE MODE

Excellent beam quality by design



BEAM POINTING STABILITY

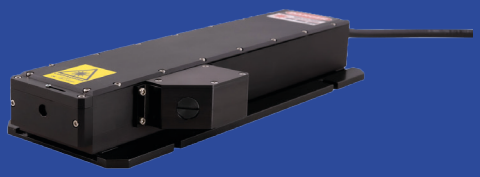
By design, beam pointing is stable (several weeks without adjustment)

Our lasers offer unique performances in terms of low noise and high power, combined with the efficiency and stability of fiber lasers. As such they are the precision tools of choice for researchers in fields such as optical trapping, atomic cooling. Our industrial customers see our solution as the only viable alternative to argon lasers in terms of performance, frequency stability and pointing stability.

Optical Specifications

Wavelength[1]	**488 nm**	**515 nm or 532 nm**
Output power	Up to 2 W	Up to 10 W
Single frequency[2] linewidth	< 200 kHz	
Narrowband linewidth	< 100 pm	
Spatial mode	TEM00	
Beam quality	$M^2 < 1.1$	
Beam diameter « free space »	1 ± 0.2 nm	
Short term power stability	< ± 0.3%	
Long term power stability (8 hours)	< ± 0.5%	
Noise [100Hz - 10MHz]	< 0.2% RMS	< 0.05% RMS
Pointing stability	< ± 0.5 µrad/°C	
Output polarization[3]	Vertically polarized > 300: 1	
Output power tunability	1 to 100% (10 to 100 recommended)	
Laser control	Multi-turn potentiometer, Touch screen, Analog voltage	

General Specifications

Rack dimension	19"3U (460x440x130 mm)
Rack cooling	Air
Optical head dimension	 325x120x50 mm
Optical head cooling	Coolerless
Umbilical cable length	1,35 m
Supply requirements	90-240 V/50-60 Hz
Electrical power consumption	200 W < ... < 300 W

[1] Other wavelengths available on request

[2] Typically, < 30 kHz for single frequency version, linewidth reduction down to 3 kHz available as an option with an external seeder rack

[3] Optional output : PM980/H1060/LMA/Collimated fiber/ Multiple output beam splitting depending on the output power

Options

- Azurlight Systems offers 3 types of architectures :
  internal seeder, various external seeders, amplifiers only
- Customized optical output available depending on power level :
  beam splitting : 1:3 or more, free space or fibered
- Advanced optical setup
- Combined IR/visible laser dual output head, by recycling unconverted IR radiation from a frequency doubling head

Azurlight Systems
Cité de la Photonique
11 avenue de Canteranne
33600 Pessac, France

Tel. +33 (0) 5 47 74 55 90
Fax. +33 (0) 5 47 74 55 99
Mail. contact@azurlight-systems.com
www. azurlight-systems.com

Simplified joint-stock company with a capital of 292 214 € - RCS Bordeaux Siret : 524 057 791 00021 - APE/NAF : 7490B - TVA/VAT : FR 045240577911