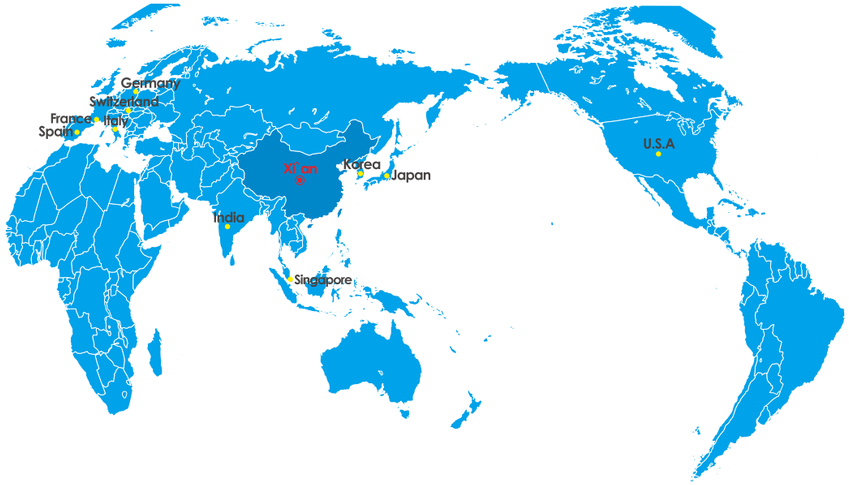
About Focuslight

Founded in 2007, Focuslight Technologies is a fast growing high-tech company committed to research, development and manufacturing of high power diode lasers. Headquartered in Xi'an Shaanxi, China, Focuslight provides products to a variety of customers consisting of OEM, ODM and system integrators worldwide. With its extensive engineering expertise in thermal, optical and mechanical design to die bonding, FAC assembling and fiber coupling to system integration, Focuslight is dedicated to provide customers with well-matched comprehensive solutions for their specific needs.

Sales Network



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Reliable High Power Diode Lasers

GMP
GENERAL MICROTECHNOLOGY & PHOTONICS

FocusEngine™

WATER COOLED VERTICAL STACKS

FOCUSLIGHT®
10th Never stop exploring

Our Features

TOP TIER CHIPS/BARS

Focuslight uses chips/bars from top tier German & American suppliers to guarantee high performance and high reliability of its diode laser products.

ADVANCED PACKAGING TECHNOLOGY

Focuslight is well recognized for its world's leading diode laser packaging technology in the industry. In collaboration with Springer, one of the world's leading scientific publishers, Dr. Victor Liu, President and CEO of Focuslight and his R&D team authored the world's 1st book on high power semiconductor laser packaging.

STRICT QUALITY CONTROL

With ISO9001 certification, Focuslight has implemented a comprehensive quality management system to assure high consistency of production, high quality of products and high level of customer satisfaction.

OPTICAL TECHNOLOGY

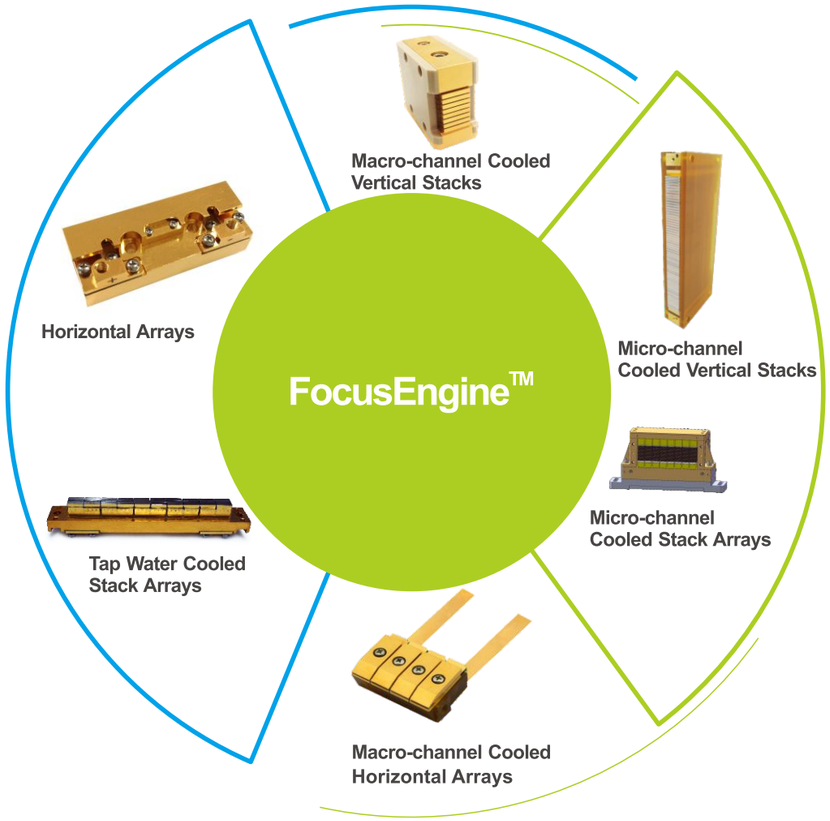
Specialized in beam shaping and outstanding ability of optical design, with 26 production lines to meet the market demand for mass production.

Core Technology
Leading the Future

FocusEngine™

WATER COOLED VERTICAL STACKS

PRODUCT SUMMARY



INTRODUCTION

- **FocusEngine™** series are vertical stacks, stack arrays, and horizontal arrays based on single bar diode laser ;
- Specialized for solid state laser pumping and scientific research;
- Wavelengthes range from 780~1550nm, output powers range from tens watts to thousands watts available in different packages;
- Using advanced bonding technology , **FocusEngine™** products have the performance of high power, high E/O conversion efficiency, high reliability, high stability, long lifetime and storage time;
- Customized **FocusEngine™** products design and OEM services are also available.

FEATURES AND ADVANTAGES

1. High power density
2. High reliability and long lifetime
3. High E/O conversion efficiency
4. Narrow spectrum width
5. Compact design facilitates end user's system integration.

Pumping of Solid State Lasers

CUSTOMIZATION SERVICE AND SUPPORT

- Focuslight provides customized service to meet different needs.
- We support customers in product design, engineering drawing,manufacturing and testing.

Bar numbers — Wavelength — Geometries — Pitch — Housing

Scientific Research

Product Features

- High power
- Narrow spectrum
- High E/O conversion efficiency and high energy density
- Long lifetime
- Excellent beam directivity
- Hard solder bonding technology (optional)

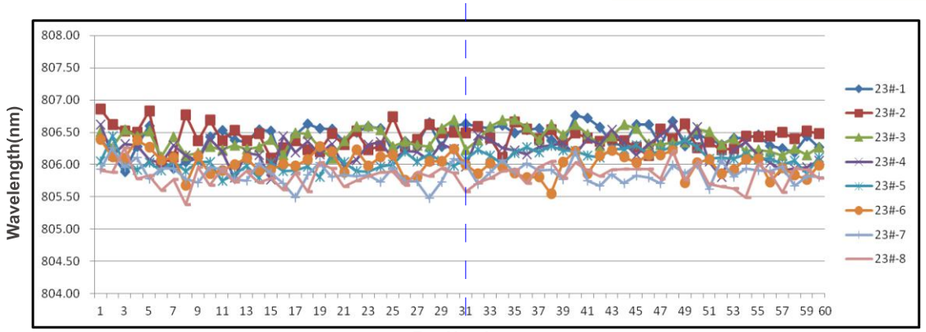
VS99

VS99 Specfication

Operation Mode		CW	QCW
Center Wavelength①	nm	808/9xx	
Spectral Width(FWHM)	nm	⩽5③	
Spectral Width(FW90%E)	nm	⩽7③	
Bar to Bar Pitch	mm	1.8	
Output Power/Bar	W	60~100(808nm)	100~500(808nm)
		60~200(9XXnm)	120~600(9XXnm)
Number of Bars	-	Up to 65	
Duty Cycle	%	-	⩽30%②
Operating Temperature	℃	20~30	
Storage Temperature	℃	5~70	
Lifetime	-	10000 hours	$1x10^9$ shots

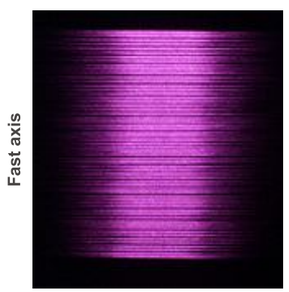
① For a wavelength needs please feel free to contact us.
② Duty cycle is from 5% to 30%.
③ Depend on power and duty cycle.

Product Wavelength Uniformity



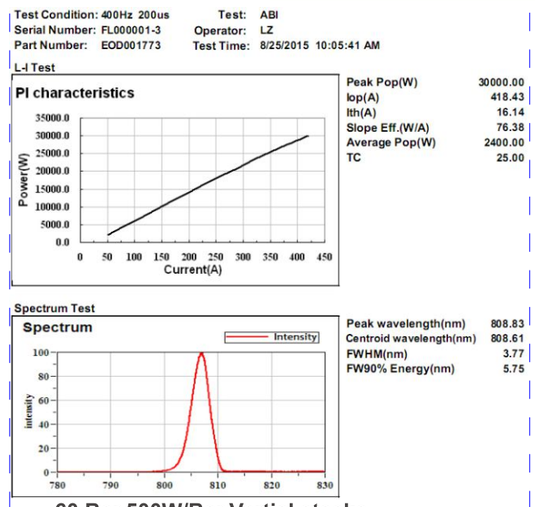
Bar Number
8X60 Bar,Area Array

Product Beam directivity

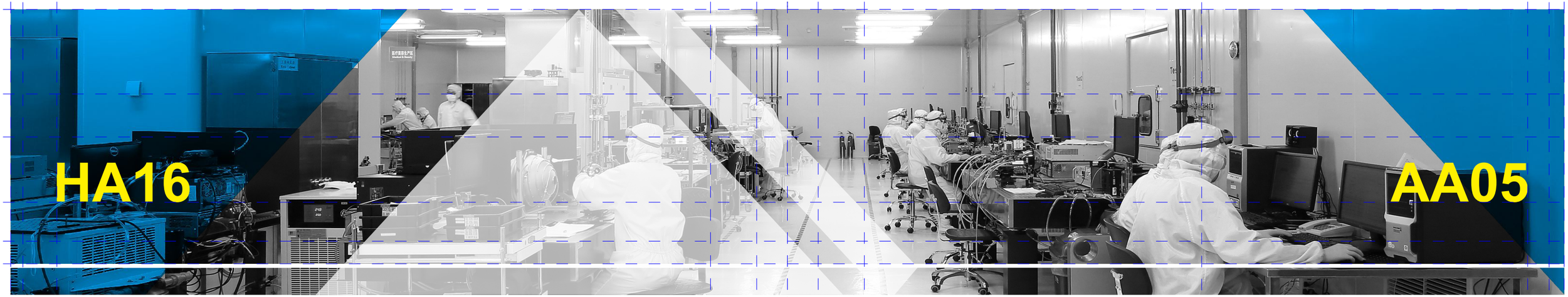


Slow axis
60 Bars Stack

Product Performance



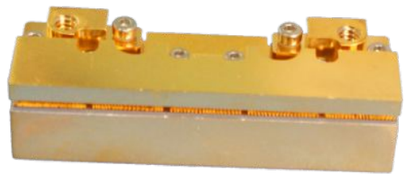
60 Bar,500W/Bar,Vertial stacks



HA16

Product Features

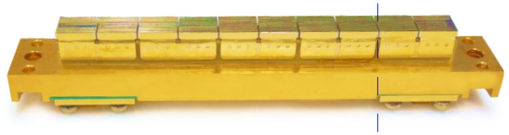
- Hard solder bonding technology
- Tap water cooled
- Excellent hard pulse durability

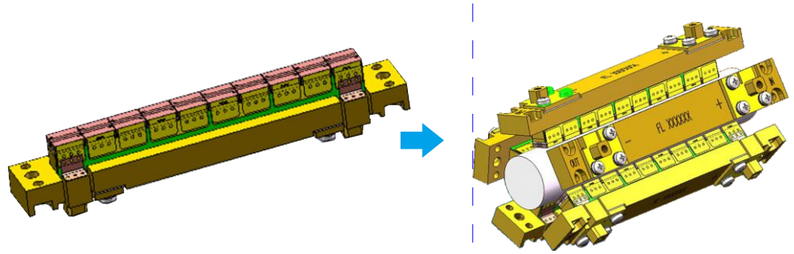


HA16 Specification			
Operation mode	–	CW	QCW
Center Wavelength	nm	808	
Output Power/bar	W	40~60	100~300
Spectral Width(FWHM)	nm	4	
Spectral Width(FW90%E)	nm	6	
Duty Cycle	%	–	⩽50%①
Operating Temperature	℃	20~30	
Storage Temperature	℃	-40~80	
Lifetime	–	10000hours	$1x10^9$ shots

① Specialized for 1s on 1s off

AA05





Product Features

- Tap water cooling
- Easy integration
- High duty cycle operation

AA05 Specification			
Operation mode	–	QCW	
Pulse width	μs	⩽500	
Duty cycle	%	⩽10	
Pitch	mm	0.43, 0.73, 1.13	
Lifetime	shots	$1x10^9$	
Center wavelength λ_c	nm	808	9xx
Deviation of wavelength	nm	±3	±5
Output power/bar	W	100~400	
Number of diode bars	–	10~50	
Spectral width(FWHM)	nm	⩽4	⩽6
Spectral Width(FW90%E)	nm	⩽6	⩽8
Polarization	–	TE/TM	
Operating temperature	℃	25	
Storage temperature	℃	-55~85	

VS18

Product Features

- Hard solder bonding technology
- Macro channel cooled
- High peak power
- Long lifetime
- Specialized for QCW application

VS18 Specification

Operation mode	–	QCW
Center Wavelength	nm	808/9xx
Output Power/bar	W	100~300
Spectral Width(FWHM)	nm	4
Spectral Width(FW90%E)	nm	6
Duty Cycle	%	⩽5%①
Operating Temperature	℃	20~30
Storage Temperature	℃	-40~80
Lifetime	–	1x10^9 shots

① Depend on peak power

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