



Vsilk™ Conduction Cooled Vertical Stack Diode Laser

AA10



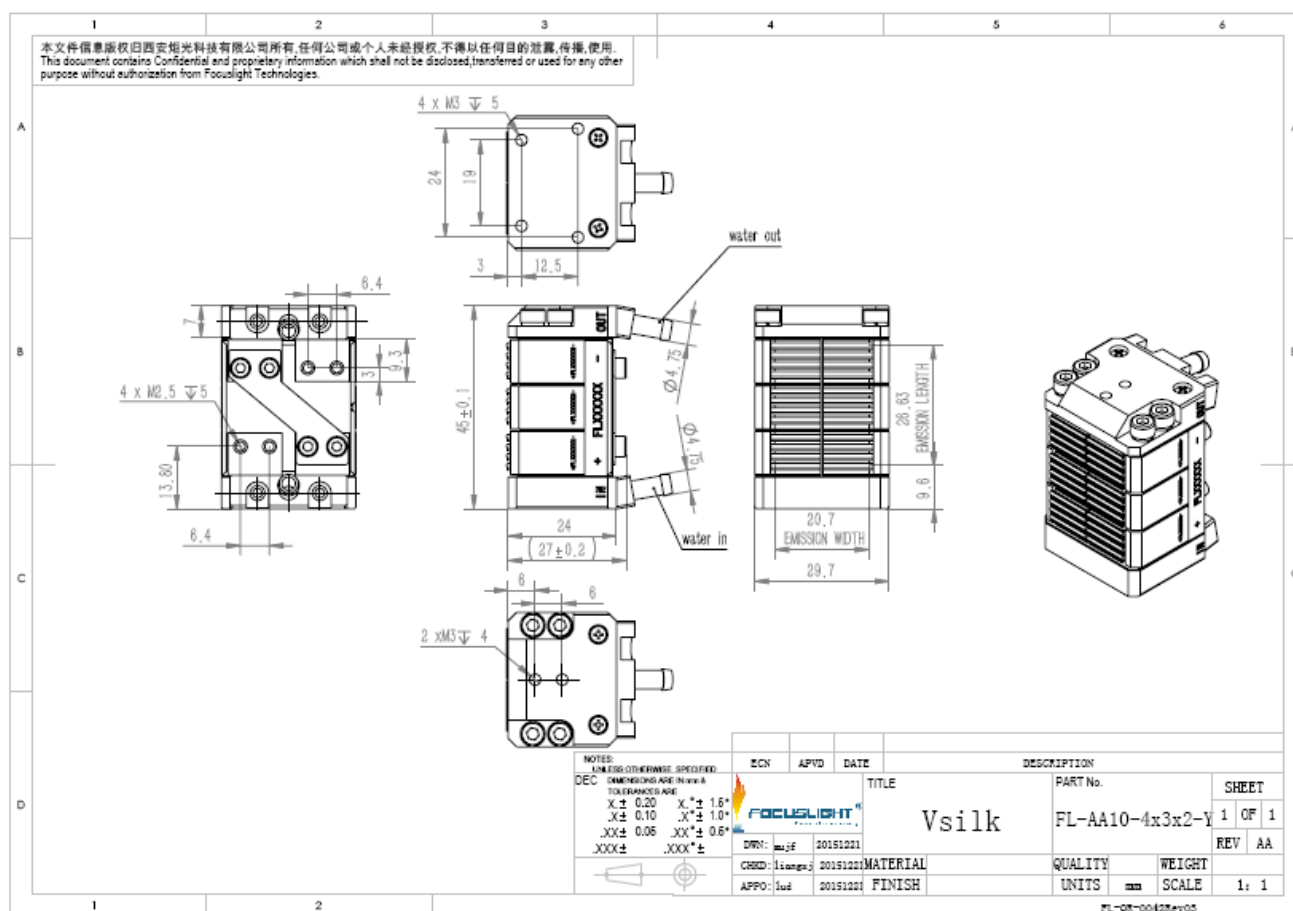
Features

- AuSn bonding
- Modular design & easy repair
- Tap water cooling
- High power
- Long lifetime
- High reliability

Applications

- Hair removal

Device Dimension (mm)



AA10-4X3X2-Y Device Dimension

1. This structure drawing is only for reference. For any other special requirement, please feel free to contact us.
2. Drawings for 20-30 bars are available. Please contact Focuslight for details.

Specification

module type ¹	units	FL-AA10-4*3*2-2400-Y
Operating Mode		QCW
Max. Pulse Width	ms	≤100
Max. Duty Cycle	%	≤10
Bar-to-Bar Spacing	mm	2.1
Structure Dimension	mm	45.1 X29.7 X27
Coolant	–	Distilled water, pure water
Flow Rate	L/min	3~4
Max Inlet Pressure	MPa	≤0.38
Optical ^{3,5}		
Center Wavelength λ	nm	808
Wavelength Tolerance	nm	±15
Output Power per Bar ²	W	100
Number of bars	–	24
Fast Axis Divergence(FWHM)	°	2~10
Slow Axis Divergence (FWHM)	°	8
Polarization Mode	–	TE
Wavelength Temp. Coefficient	nm/°C	~0.28
Electrical Parameters ^{3,5}		
Operating Current I _{op}	A	≤120
Threshold Current I _{th}	A	≤30
Operating Voltage V _{op}	V	≤ 48
Slope Efficiency	W/A	≥1.1
Power Conversion Efficiency	%	≥45
Thermal Parameters		
Operating Temperature	°C	5~ 35
Recommend Temperature	°C	25±3
Storage Temperature ⁴	°C	0~55

¹Explanation for the naming of Module Type: FL(abbreviation of Focuslight) –AAxx (structure code) –N (number of bars) –X(output power) -P(center wavelength)-Y(Fast Axis Collimation) (Q:QCW).

²Reduced lifetime if used above nominal operating conditions.

³Data at 25°C, unless otherwise stated.

⁴A non-condensing environment below ambient dew point is required for storage and operation

⁵It is recommended to use cooling water machine for laser cooling , Refrigerating capacity≥1.5*PPK * (DC) max

⁶If there are any other requirements, please contact us



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The boundary conditions (VsilK-2400)

VsilK-2400 Power Table(single bar)												
Power(W)/bar		Frequency(Hz)										I _{op}
		1	2	3	4	5	6	7	8	9	10	
Pulse(ms)	10	100	100	100	100	100	100	100	100	100	100	≤120A
	20	100	100	100	100	100	100	NA	NA	NA	NA	
	30	100	100	100	NA	80	80	NA	NA	NA	NA	
	40	100	100	NA	NA	NA	NA	NA	NA	NA	NA	Working Conditions Cooling water T =25±3C; Cooling water flow rate ≥3L/min
	50	100	100	NA	NA	NA	NA	NA	NA	NA	NA	
	60	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	70	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	80	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	90	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	100	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	

1. The use of the above-mentioned conditions, different colors of the operating current (I_{op} will be subject to the actual test report) is only for reference;
2. Not listed in the table above conditions of use, please consult the Focuslight technology.