

# Actively Cooled Vertical Stack Diode Laser

## Vsilk3-3000



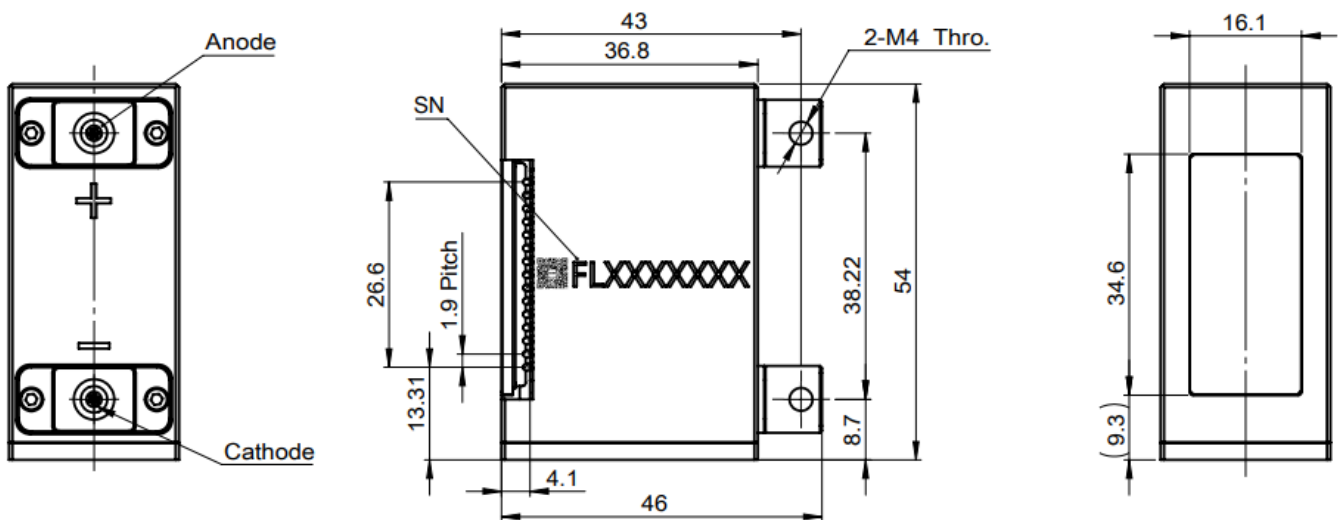
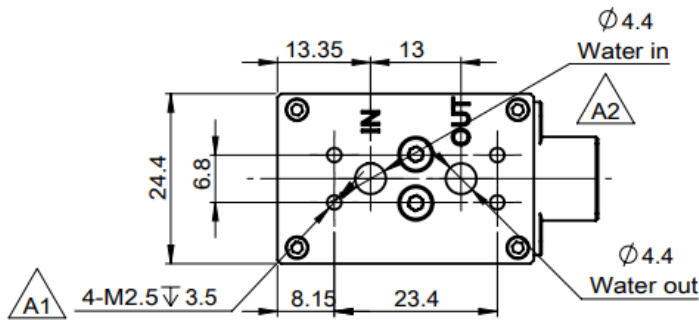
### Features

- High effective energy
- High Peak Power
- High reliability
- Compact structure

### Applications

- Hair removal

### Product Dimensions (mm)



**Remark:** The structure drawing is for reference only. Please feel free to contact us for any special requirements.

## Product Specifications

### Product Code

Part No. <sup>1</sup>

### (Typical Configuration)

FL-Vsilk3-15x1-3000-808-Y

Optical Data <sup>2</sup>	Unit	Value
Centroid Wavelength	nm	808
Wavelength Tolerance	nm	± 15
Output Power <sup>3</sup>	W	3000
Pulse Width	ms	20
Duty Cycle	%	20
Number of bars	-	15
Bar to Bar Pitch	mm	1.9
Fast Axis Divergence 95% with FAC	°	8 ~ 10
Slow Axis Divergence 95%	°	12 ~ 14
Emitting Area Size	mm	26.6 × 10
Wavelength Temp. Coefficient	nm/°C	~ 0.32

### Electrical Data <sup>2</sup>

Operation Current	A	< 178
Threshold Current	A	≤ 20
Operating Voltage	V	≤ 30
Slope Efficiency per Bar	W/A	≥ 1.2
Power Conversion Efficiency	%	≥ 55
Typical Working Condition	-	3000W@20ms-10Hz 1800W@40ms-10Hz

### Miscellaneous Data

Operating Temperature <sup>4</sup>	°C	22 - 28
Coolant <sup>5</sup>	-	Purified water with ion exchange resin filter
Coolant Flow Rate	L/min	4.25-5
Coolant Pressure	MPa	~0.35

<sup>1</sup> Part No. = Brand Code - Series - Power - Centroid Wavelength .

<sup>2</sup> Data at 25°C unless otherwise stated.

<sup>3</sup> Reduced lifetime if used above nominal operating conditions.

<sup>4</sup> A non-condensing environment is required for storage and operation below ambient dew level.

<sup>5</sup> Coolant and filter need to be replaced every three months.



**Energy Table**

VsilK3-15x1-3000 Energy Table													
Energy(J)		Frequency(Hz)										Iop	
		1	2	3	4	5	6	7	8	9	10		~173A
Pulse Width (ms)	10	30	30	30	30	30	30	30	30	30	30		~150A
	20	60	60	60	60	60	60	60	60	60	60		~140A
	30	74	74	74	74	74	74	74	74	74	74		~125A
	40	90	90	90	90	90	90	90	90	90	90		
	50	113	113	113	113	113	113	113				Water Temperature T=25±3°C Flow Rate: 4.25~5L/min	
	60	135	135	135	135	135	135						
	70	137	137	137	137	137							
	80	156	156	156	156								
	90	176	176	176									
	100	195	195										
	200	390											

