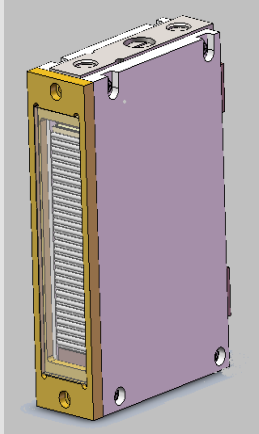# FocusEngine™

Micro-Channel Water Cooled Vertical Stack Diode Laser(QCW)

VS120
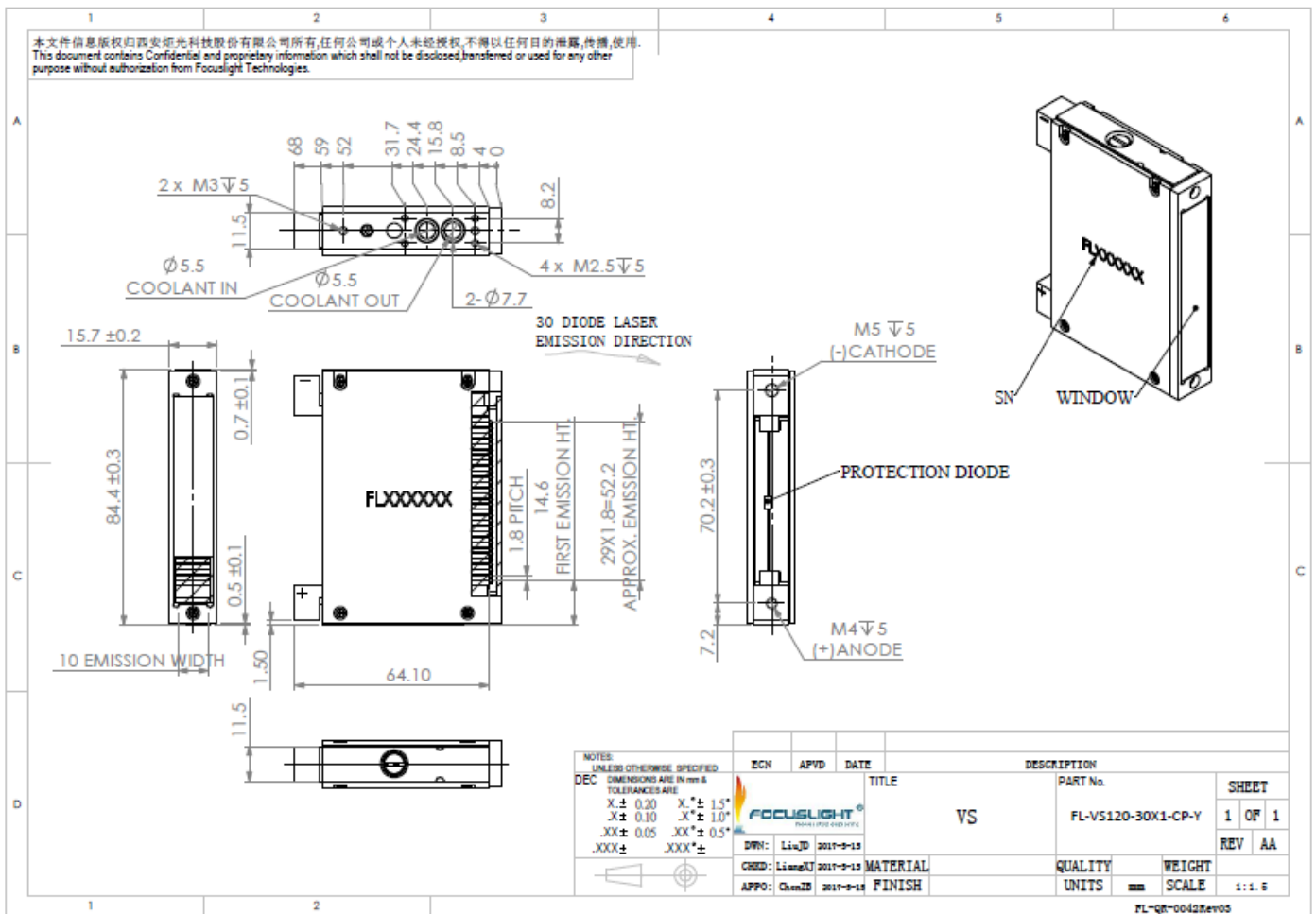

Features
- Long lifetime
- Narrow spectrum
- High power

Applications
- Pumping
- Research
- Industry

Device Dimension (mm)

This structure drawing is only for reference. For any other special requirement, please feel free to contact us.

Specification

Module Type [1]	Units	FL-VS120-NX1-500XN-808(Q)
Optical [2]		
Center Wavelength λ	nm	808
Wavelength Tolerance	nm	±3
Output Power per Bar	W	500
Available Number of bars	-	1-65
Bar-to-Bar Spacing	mm	1.8
Spectral Width FWHM	nm	≤4
Spectral Width FW90%E	nm	≤6
Pulse Width	µs	200
Duty Cycle	%	≤8
Fast Axis Divergence(FWHM)[3]	degree	35
Slow Axis Divergence(FWHM)	degree	8
Polarization Mode	-	TE/TM
Wavelength Temp. Coefficient	nm/℃	~0.28
Electrical Parameters		
Operating Current I_{OD}	A	≤430
Threshold Current I_{th}	A	≤25
Operating Voltage V_{OD} [4]	V	≤2
Slope Efficiency[4]	W/A	≥1.1
Power Conversion Efficiency	%	≥48
Thermal Parameters		
Operating Temperature[5]	℃	20~30
Storage Temperature[6]	℃	0~55
Coolant	-	Deionized Water
Flow Rate[4]	L/min	0.3~0.4
Max Inlet Pressure	kPa	380
Conductivity	µS/cm	＜5

[1] FL(abbreviation of Focuslight) - VSxx(structure code) –Nx1(Number of Bars) -xx(Power) -xx(center wavelength).

[2] Data at 25°C temperature, unless otherwise stated.

[3] For fast axis collimation: divergence ≤0.5°.

[4] Parameters for single Bar.

[5] If exceed operating temperature, the device lifetime will be impacted, which will cause wavelength drift.

[6] Please avoid use and storage in the condensation environment

Please feel free to contact with Focuslight if you have any requirement.

FOCUSLIGHT®
Never stop exploring

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