

# Variable Beam Laser System

## Flux H series



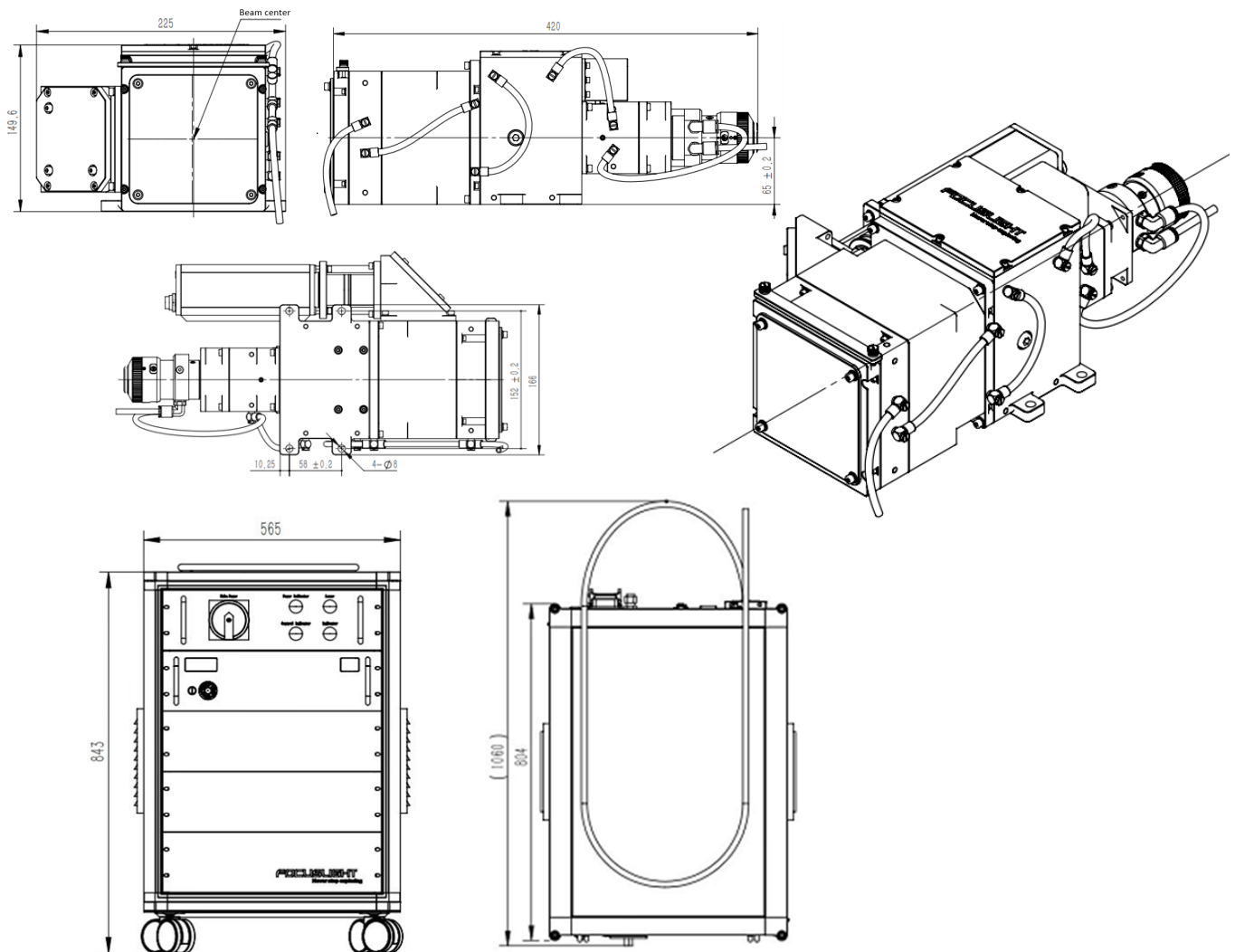
### Features

- Adjustable beam size
- Easy maintenance
- Security monitoring
- High conversion efficiency
- Pyrometer
- Closed-loop control

### Applications

- Non contact heating
- Laser assisted bonding
- Laser mass soldering
- Laser drying
- Material surface treatment

### Product Dimensions (mm)



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

## Product Specifications

<b>Product Code</b>	<b>(Typical Customization)</b>
Part No.	FL-Flux-H4000X

General Data	Unit	Value
Laser Process Head Dimensions (Height × Width × Depth)	mm	150mm x 205mm x 425mm
Max. Weight (Laser Process Head)	kg	15
Control Cabinet Dimensions (Length × Width × Depth)	mm	804mm x 565mm x 843mm
Max. Weight (Control Cabinet)	kg	70

Laser Data		
CW-nominal Output Power	W	4000
Wavelength	nm	976±10
Fiber Diameter	µm	800
Fiber Length	m	10
Fiber Plug Type	-	QBH

Electrical Data		
Operating Voltage	V	380
Max. Operation Current	A	16
Supply Frequency	Hz	50 - 60
Number of Leads	-	3L + N + PE

Thermal Data		
Operating Temperature	°C	5 ~ 45
Storage Temperature	°C	5 ~ 45
Chiller Type	-	Water-cooled

Pyrometer Data		
Detection Wavelength	nm	2000-2600
Temperature Measurement Range	°C	50-800
Temp. Control Precision	°C	±5
Sampling Rate (Standard)	kHZ	>1

Interfaces Data		
Interface Type	-	RS232/Analog I/O
Socket Type	-	DB9/DB25

Chiller Data <sup>2</sup> (Optional)		
Flow Parameter	L/min	>30
Cooling Requirements	-	Two ways(Laser head + control cabinet)
Water Temp.	°C	25±3
Water Pressure	bar	3-5.3
Cooling Capacity	kW	>4.5

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

<sup>2</sup> The system can be used combined with chillers ordered from Focuslight or compatible chillers with the same capacity.



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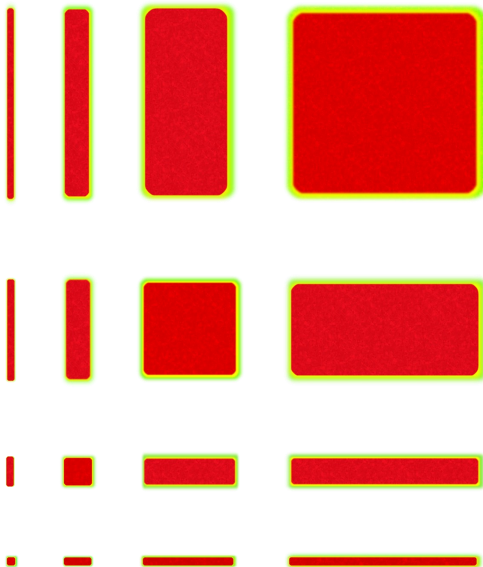
**Product Code** (Typical Customization)  
Part No. FL-Flux-H4000X

### Optical Data

Working Distance	mm	300/400/700
Focal Depth	mm	2
Line Length X-direction <sup>3</sup> (top-hat )	mm	2-20/20-100/100-200
Line Length Y-direction <sup>3</sup> (top-hat )	mm	2-20/20-100/100-200
Uniformity of X and Y-direction <sup>4</sup>	-	>95%
The optical efficiency	-	>90%

<sup>3</sup>Beam length and width fixation or adjustable

<sup>4</sup>Uniformity test standard conforms to ISO 13694



Examples of beam size ranges at different working distance

Working Distance	Beam Size Range
300 mm	2 mm * 2 mm – 20 mm * 20 mm
400 mm	20 mm * 20 mm – 100 mm * 100 mm
700 mm	100 mm * 100 mm – 200 mm * 200 mm

