CANARE

BPF-Sxxx series

Beam Profiler for High Power Lasers
Total spectral range 380 – 1070nm

NEW

Features

- Unique fluorescence imaging technology [PAT]
- Direct measurement at the front top fluorescent plate without any optical attenuators
- High optical damage threshold
- Speckle free
- Real time imaging
- Operation mode, CW and pulsed with ex. trigger

Applications

- Laser processing
- Laser alignment
- Laser manufacturing
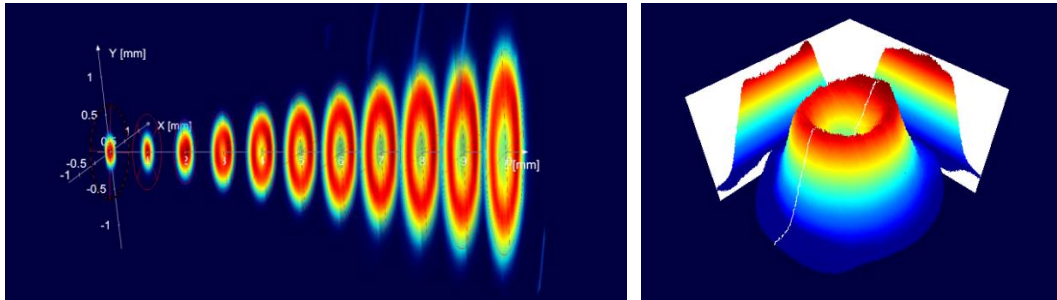- Medical care
- Industry
- LiDAR

Specifications

*The figures in this table are typical measured values at our company, not the values for guaranteeing.
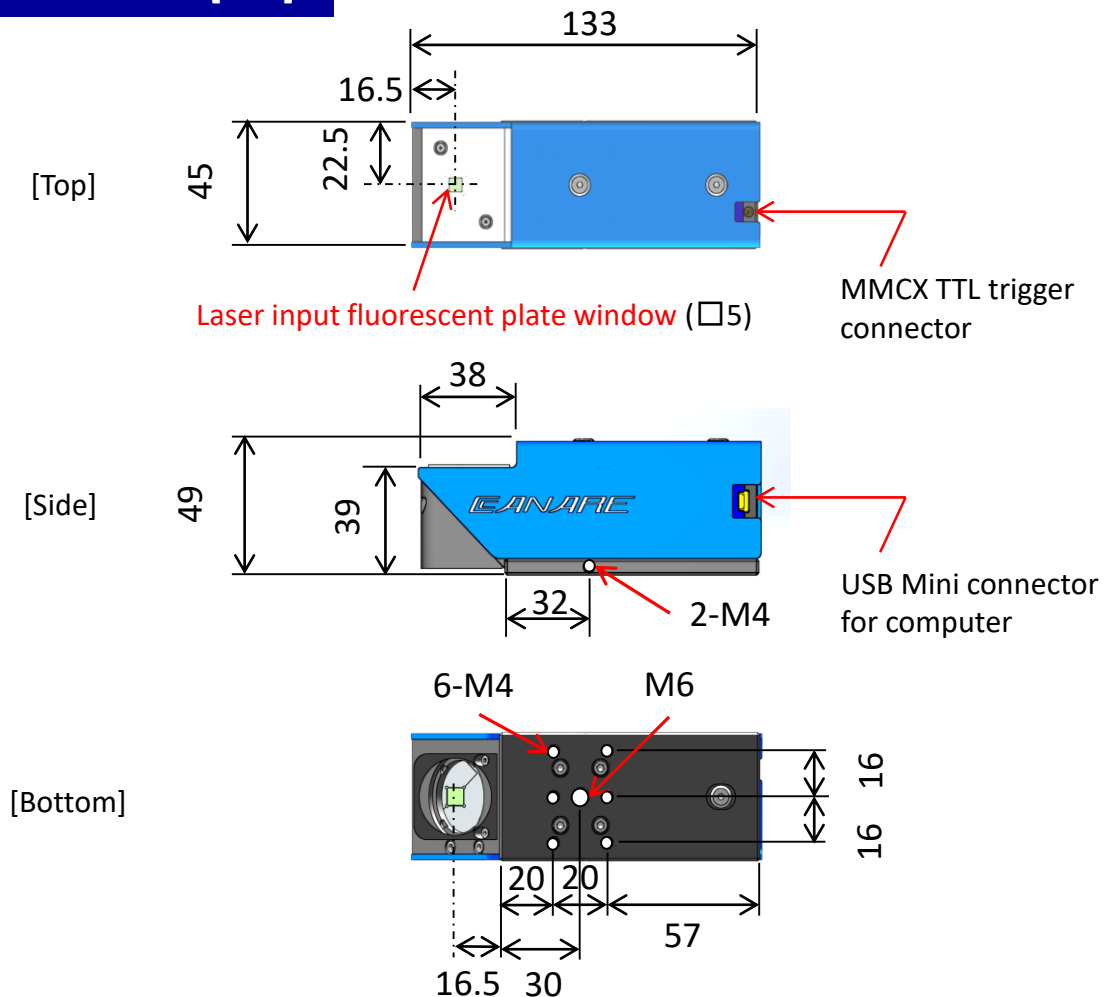
Spectral range	380 – 550nm	(S400)
	750 – 900nm	(S800)
	900 – 980nm	(S900)
	1030 – 1070nm	(S1000)

Active area	□5mm
Number of pixel	1280 x 1024
Resolution (pixel size)	5.3µm x 5.3µm
Min. beam diameter	53µm
Max. beam diameter	4mm
Frame rate	up to 20Hz
Operation modes	CW / Pulse
Dimensions (WxHxL)	45 x 49 x 133mm
Weight	460g
Operating temp. range	0 – 40℃

Linearity error
$< 10\%$ ($1.2MW/cm^2$ S400/S900)
$< 10\%$ ($3kW/cm^2$ S800/S1000)

Spatial inaccuracy	< 1%

Damage threshold
$>$ $2MW/cm^2$ (S400)
$>$ $1MW/cm^2$ (S800/S900)
$<$ $100kW/cm^2$ (S1000)

Signal intensity non-uniformity
$< 10\%$

Beam diameter non-uniformity
$< 5\%$

Interface	USB2.0
OS	Windows 7/8/10 (32/64bit)

Value Innovator

Performance Data Diagrams

2D cross-sectional views of the BPF-L800 (compatible with S800) output beam from a multimode optical fiber measured from the fiber end face at 1mm intervals. The core diameter of the fiber is 365µm and the output power is 10W CW at 885nm. (Cladding mode observed.)

Device dimensions [mm]

[Top]

133

16.5

22.5

45

Laser input fluorescent plate window (□5)

MMCX TTL trigger connector

[Side]

38

49

39

32

2-M4

CANARE

USB Mini connector for computer

[Bottom]

6-M4   M6

16   16

16

20 20

57

16.5   30

Software

(1) Software is provided on the USB memory stick included with the product.
(2) Three software versions are made available, with different functions depending on the version. Please specify the version required when ordering.
Version: **Lite, Standard, Professional**
For details, please refer to the software function comparison table on our website.