LAM Beam Analyzer

- High power beam measurements at the working tabletop.
- Built-in air-cooled sampler
- Industry's leading knife-edge system
- Unique tomographic image reconstruction
- Beam measurements down to 35 microns and up to 8 mm
- Accurately measures profile, position and power

Specifications

Laser Type	CW
Beam width resolution	For beams > 100 µm in size: 1 µm. For beams <100 µm in size: 0.1 µm
Beam Size	35 µm - ⌀8 mm
Spectral Response	Si: 350 - 1100 nm. Contact factory for other wavelengths
Resolution (H x V pixels)	Adaptive according to beam size
Sensor Active Area (mm)	9 x 9
Number of Blades	7 blades with image tomographic reconstruction
Gain Control	Automatic
Frame Rate	5 fps
Working Distance	49 mm (contact factory)
Maximum BPP	Max. input angle – 25 deg.
Maximum power density	1,000,000 W/cm² (contact factory)
Power measuring	With user's pre-calibration at a selected point

Power range @900/1070 nm	Up to 4 kW (with filters & pressurized air-cooling, some restrictions may apply)
Output power from back side of beam sampler	With beam dump – no significant output power
Cooling conditions	Filtered pressurized air of 6-8 Bar
Sensor type	Silicone (Si) - Knife-edge technology
Beam width accuracy	±1.5%
Power accuracy	±5%
Position resolution	1 µm
Pixel Size	Adaptive according to beam size
Pixel Bit Depth	12 bits
Background Subtraction	Automatic
Power Requirements	~2.5 Watt (Via USB 2.0 interface)
Dimensions (L x W x H) in mm	147 x 105 x 48
Weight (typical)	Sensor head with cable ~ 1500 gr.
Min. Hardware Requirements	CPU i3 1.6 GHz, 4 GB RAM
Interface	USB 2.0, Windows 7/8/10 (32 & 64 bit)
Operating Temperature	0° – 35° C

Ordering Information

LAM-BA: 7-blades, Si detector with high power attenuator and mounting adapter.

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43.3

EF6 +0.022
Ø6 +0.014 ▽ 7

To center of detector plane

Reference center of measured beam

106.7

RCA Trigger In

INPUT BEAM

Alumina protective shield

6mm Air input

48

RESIDUAL POWER OUTPUT

Reference measurement plane

Copper Mirror beam deflector

USB cable

105

118

130

147

Interchangeable Filter Drawer

Input Aperture

INPUT

2 x 6.60 X 17 THRU
⌴ 11 ▽ 6

75

Connector for filtered pressurized air
(suitable for 6mm tube)