

Technical Specifications

Beam Analyzer – LBA-C-100

The LBA-C-100 is a beam analyzer designed to handle high continuous power while measuring beam parameters like the divergence or RGB alignment of laser sources.

In particular, it enables to analyze the beam of high-power laser projectors.

A PC interface enables to do a live measurement while focusing or aligning the beams safely.

Downloads are available at this link: <https://lightdiction.com/en/Downloads/>

FEATURES

- **Compact** and robust design
- Very high **resolution**
- Handles high **continuous power**
- **Easy setup**
- **Easy PC interface.**
- **Live measurement** of alignments and divergences
- Power and communication through **USB**

TYPICAL APPLICATIONS

- Lens collimating of laser sources
- Divergence measurements
- Accurate RGB alignment
- Power measurement

REQUIREMENTS

- The LBA-C-100 Beam Analyzer requires USB 3.0 to communicate
- Software interface for Windows 10 / 11.

TECHNICAL SPECIFICATIONS

Parameter	Comment	Min	Typ	Max
Optical Specifications				
P_{opt}	Optical power (*) (**)	0.1W	-	100W
	Accuracy on power measurement (Calibrated on 635nm / 520nm / 445nm) Other wavelengths can be added by the user.		+/-1 %	
R_{Φ}	Resolution on divergence (by design)	-	0.01 mrad	-
	Typical accuracy (+/-)	-	0.01 mrad	-
Φ	Divergence measured (FWHM)	0.1 mrad	-	10 mrad
D	Input beam diameter	-	-	22mm
λ	Wavelength detected	400nm	-	1000nm
Mechanical / Housing Specifications				
L x W x H	Length x Width x Height (mm) – Without the holder With the holder		105 x 75 x 59 153 x 110 x 70	
m_{sys}	Weight – without the holder with the holder		600g 800g	
Electrical Specifications				
P_{USB}	Typical Power consumption (USB 3.0)	-	2W	-

(*) The case of the LBA-C must remain below 55 °C while operating. It may be need to dissipate heat from the case with a fan when using the device with high power beams for a long period.

(**) A correct alignment should be done before setting the laser projector to maximum power. The user must follow the alignment procedure described in the User Manual to prevent damage to the system.

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Revision History

Date	Information	Version
15/09/2023	Initial information	1.0