Beam Analyzer High Power

- Built-in air-cooled sampler
- Industry's leading knife-edge system
- Unique tomographic image reconstruction
- Beam measurements down to 15 microns and up to 9 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	⌀15 µm - ⌀9 mm
Spectral Response	350 - 1100 nm (InGaAs version available)
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	Optical distance from input surface to sensor is 41 ± 0.3 mm
Maximum BPP	Max. N.A. 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	90% of input power. The Beam Sampler directs only a small portion of laser power for detector measurements. Most of the power exits according to drawing.
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	104x105x36
Weight (typical)	800 gr
Min. Hardware Requirements	CPU i3 1.6 GHz, 4 GB RAM Min. Resolution 1366 x 766
Interface	USB 2.0, Windows 7/8/10 (32 & 64 bit)
Operating Temperature	0° – 35° C

Ordering Information

BA7-Si-USB-SAM3-HP-B: 7-blades, Si detector 9mm square with high power attenuator and mounting adapter.

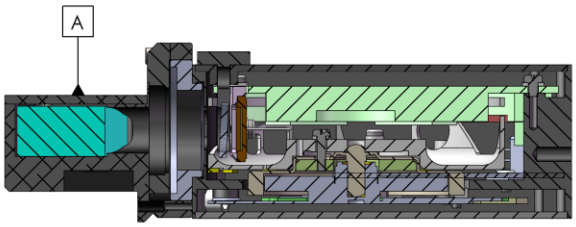
DUMA OPTRONICS LTD.

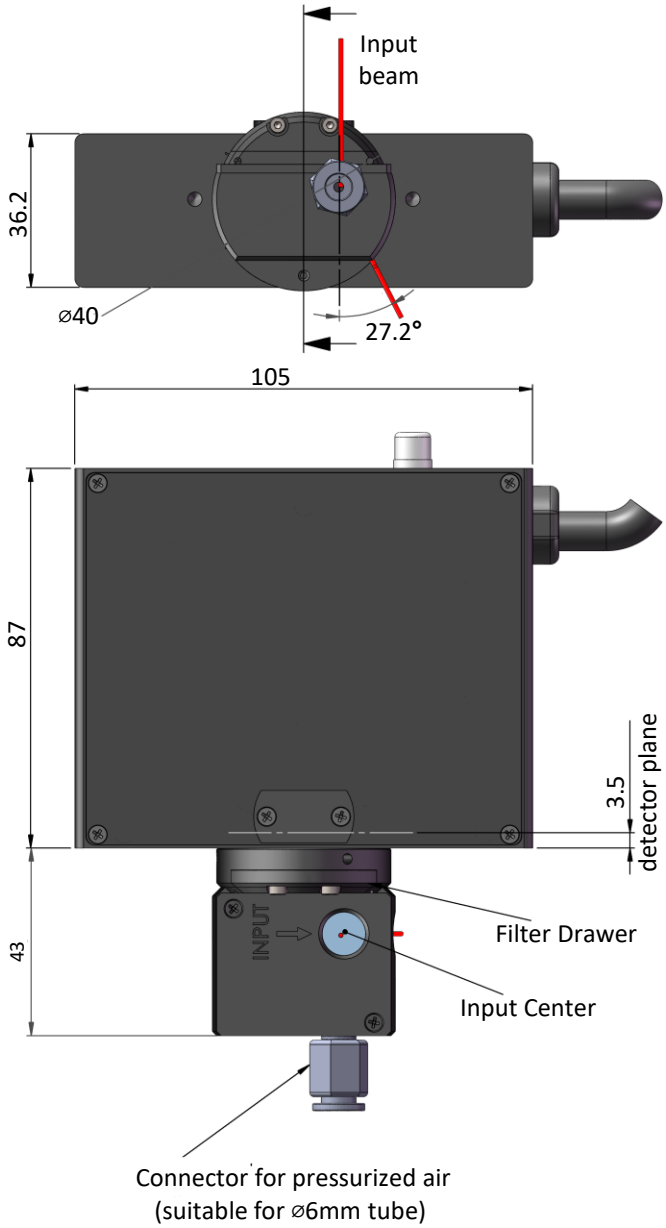
Website: http://www.dumaoptronics.com

E-mail: sales@duma.co.il

October 2021

Beam Analyzer High Power





Optical distance from Input plane [A] to Detector Plane:
41±0.3

Warning: For focused beams, Focal Point must be at least 30 mm after input plane [A] (towards the sensor).

Focusing on input optics will damage the optical system!

DUMA OPTRONICS LTD.

Website: http://www.dumaoptronics.com

E-mail: sales@duma.co.il

October 2021