

Beam Shaper 180 x 180 mm²

Product number: IOS000292



General Description:

| Advanced Optical Solutions |

The beam shaper can be easily plugged to an optical fiber. It generates a homogeneous field of $\geq 180 \times 180 \text{ mm}^2$ with a top-hat profile along both axes under a specified illumination angle.

Specification Data

	Unit	Value
Housing material		Anodized aluminium
Dimensions (without connectors)	mm ³	352 x 110 x 80
Beam size at exit window FW 100% power content (h x v)	mm ²	18 x 20 (± 2)
Transmission	%	≥ 90
Efficiency ¹ ($I_{\text{field,hom}} / I_{\text{field,total}}$)	%	≥ 80 (typical 85)
Inhomogeneity ($(I_{\text{max}} - I_{\text{min}}) / (I_{\text{max}} + I_{\text{min}})$)	%	≤ 7.5 (integrated over the other axis)
Working distance	mm	680 (± 25)
Angle of incidence (AOI)	°	15 ± 3 (typical 15 ± 1.5)
Homogeneous field dimensions	mm ²	$\geq 180 \times 180$

¹ $I_{\text{field,hom}} / I_{\text{field,total}}$ denotes the ratio of the integrated power in the homogeneous field versus the total power at the field plane

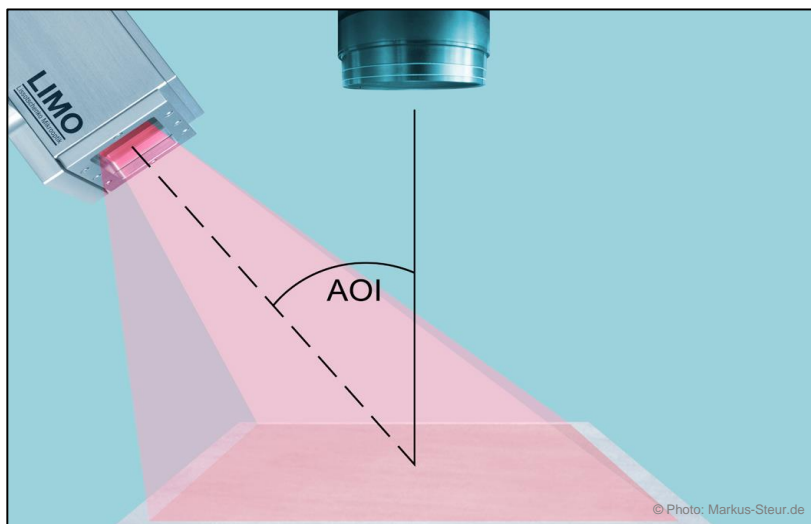
The Beam Shaper is Designed for:

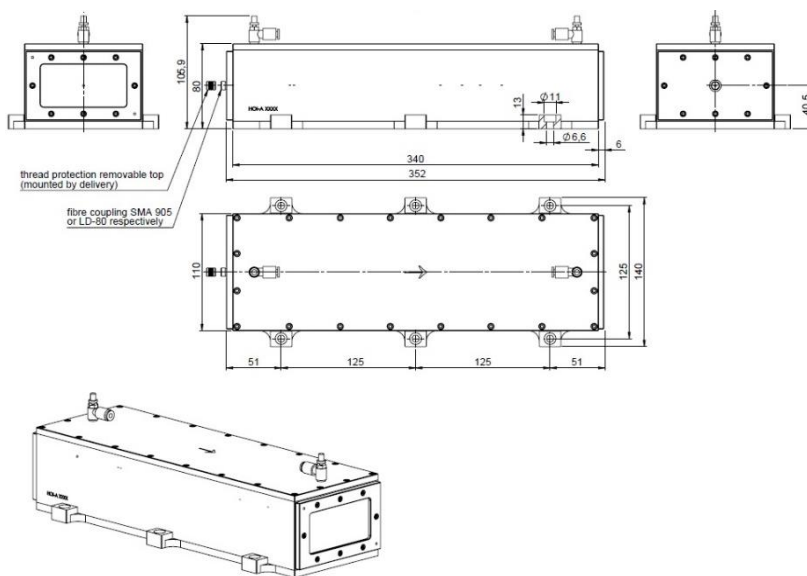
Laser Source Data

	Unit	Value
CW – nominal output power	W	≤ 200
Centre wavelength	nm	808
Fibre core diameter	μm	400
Numerical aperture (NA)		0.22
Fibre connector		SMA 905

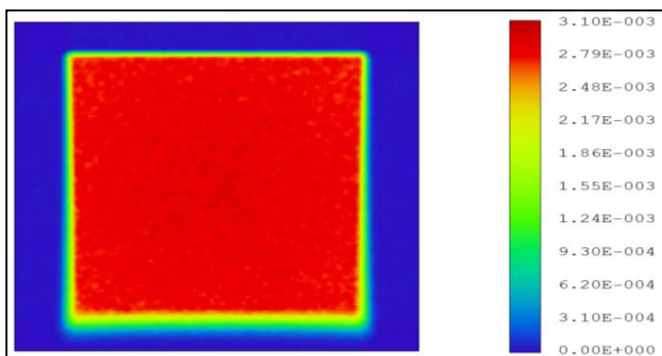
On request

- Various wavelengths
- Different Fibre core diameters or fibre connectors
- Different angle of incidence
- Any other kind of custom homogenizer module

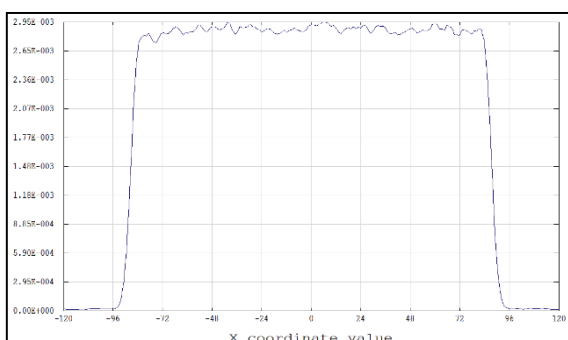




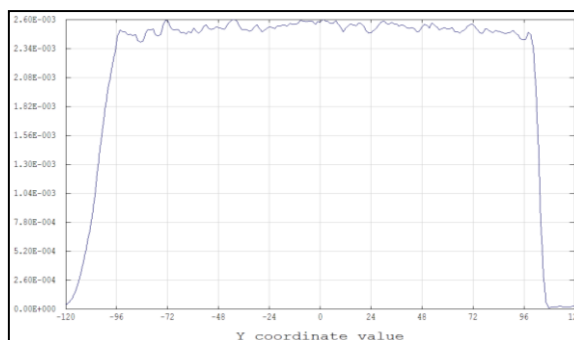
Beam Simulation Data



Intensity profile (typically)



Intensity cross section x-direction



Intensity cross section y-direction

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