

π Shaper 6_6

**Series of high efficient Homogenizers
Converting Gaussian to Flattop profile
Lasers of UV, Visual and near-IR spectrum**



With these unique tools it is possible to convert a single mode or multimode laser beam of similar to Gaussian intensity profile into a collimated Flattop beam with nearly 100% efficiency.

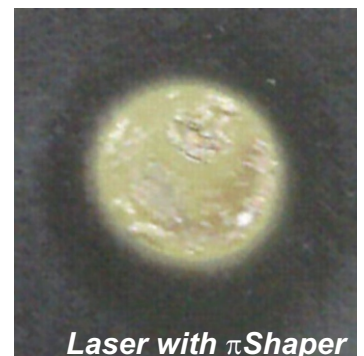
π **Shaper** produces collimated Flattop beam (like Greek letter π) over a large working distance. This enables to manipulate and re-size the beam with conventional imaging optics.

Almost the same effective sizes of input and output beams let it easy to integrate the π **Shaper** in your application.

Originally designed as achromatic optical system the π **Shaper** can work simultaneously with various lasers of corresponding spectrum

Applications:

- Welding of metals and plastics
- Flow Cytometry
- Holography
- Marking and Engraving
- Material micromachining
- Particle Image Velocimetry
- Particle Size Analyzing
- Laser ablation
- Laser annealing



Comparison of engraving results (Courtesy of EO Technics)

Beam Shaping never was so easy!

No more losing of energy!

Technical Specifications

Common for all π Shaper 6_6 models:

Input beam	TEM ₀₀ or multimode with Gaussian or similar intensity profile
Output beam	<ul style="list-style-type: none"> - Collimated - Flat-top, uniformity within 5% - Diameter 6 mm - High edge steepness
Other features	<ul style="list-style-type: none"> - Achromatic for design wavelengths - Compact design suitable for scientific and industrial applications - Long working distance
Overall dimensions	<ul style="list-style-type: none"> - Diameter 39 mm - Length 133 mm
Mounting	M 27x1
Weight	250 g

π Shaper 6_6 features

Model	_852	_1064	_532/1064	_1319	_1550
Type	Telescope of Galilean type (without internal focus)				
Input beam features	Collimated, Diameter 6 mm (1/e ²)				
Optimum wavelength range*, nm	800 - 900	1020 - 1100	520 - 550, 1020 - 1100	1200 - 1400	1500 - 1600
Applications based on	Ti:Sapphire and other near IR lasers	Nd:YAG, Fiber and other near IR-lasers	1 st , 2 nd Harm. Nd:YAG, other similar lasers	near IR lasers, laser diodes	near IR lasers, laser diodes
Model	_VIS	_410/820	_TiS	_350	_350_C
Type	Telescope of Galilean type (without internal focus)				Collimator, w/o internal focus
Input beam features, Data for 1/e ²	Collimated, Diameter 6 mm				<ul style="list-style-type: none"> - Divergent - Div. 75 mrad - Input Dia 6 mm
Optimum wavelength range*, nm	420 - 680	400 - 420, 800 - 840	700 - 900	330 - 370	330 - 370
Applications based on	He-Ne, He-Cd, other Visual lasers	1 st and 2 nd Harm. of Ti:Sapphire	Ti:Sapphire, near IR lasers	3 rd Harm. Nd:YAG, other similar lasers	3 rd Harm. Nd:YAG, other similar lasers

* - according to coatings applied

