

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.

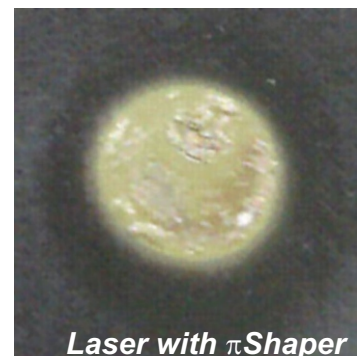
Originally designed as achromatic optical system the π **Shaper** can work simultaneously with various lasers of corresponding spectrum

Applications:

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



TEM₀₀ Laser



Laser with π Shaper

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	_532	_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	520 - 550	1200 - 1400	1500 - 1600
Applications based on	Ti:Sapphire NIR lasers	Nd:YAG, Fiber other NIR lasers	1 st , 2 nd Harm. Nd:YAG similar lasers	2 nd Harm. Nd:YAG similar lasers	near IR lasers laser diodes	near IR lasers laser diodes
Model	_VIS	_410/820	_TiS	_325	_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	305 - 345	330 - 370	330 - 370
Applications based on	He-Ne, He-Cd Visual lasers	1 st , 2 nd Harm. of Ti:Sapphire	Ti:Sapphire near IR lasers	UV lasers	3 rd Harm. Nd:YAG other similar lasers	
* - according to coatings applied						

