

# $\pi$ Shaper 5\_6

**Series of high efficient Homogenizers to transform Gaussian to Flattop profile of laser beams of Visual and UV 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.

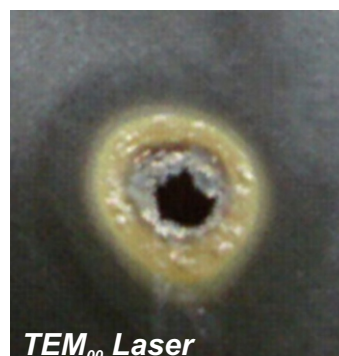
$\pi$ **Shaper** produces collimated Flattop beam (like Greek letter  $\pi$ ) over a large working distance. This enables to manipulate and re-size the beam with conventional imaging optics.

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

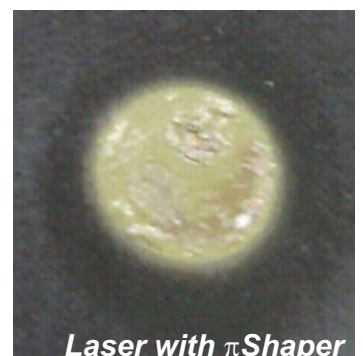
Originally designed as achromatic optical system the  $\pi$ **Shaper** can work simultaneously with various lasers of corresponding spectrum

Applications:

- Free Electron Lasers
- Display Technologies
- Flow Cytometry
- Holography
- Marking and Engraving
- Printing
- Material micromachining



*TEM<sub>00</sub> Laser*

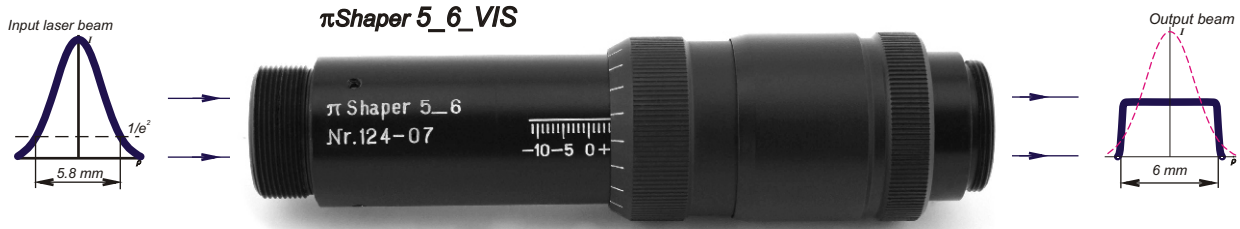


*Laser with  $\pi$ Shaper*

*Comparison of engraving results (Courtesy of EO Technics)*

***Beam Shaping never was so easy!***

# No more losing of energy!



## Technical Specifications:

Common for all <i>piShaper 5_6</i> models:		
Type	Telescope of Galilean type (without internal focus)	
Input beam	<ul style="list-style-type: none"> <li>- Collimated</li> <li>- TEM<sub>00</sub> or multimode with Gaussian or similar intensity profile</li> </ul>	
Output beam	<ul style="list-style-type: none"> <li>- Collimated</li> <li>- Flattop, uniformity within 5%</li> <li>- High edge steepness</li> </ul>	
Other features	<ul style="list-style-type: none"> <li>- Achromatic design</li> <li>- Compact design suitable for scientific and industrial applications</li> <li>- Materials of lenses CaF<sub>2</sub>, Fused Silica</li> <li>- Long working distance</li> </ul>	
Overall dimensions	<ul style="list-style-type: none"> <li>- Diameter 39 mm</li> <li>- Length 155 mm</li> </ul>	
Weight	250 g	
Mounting	M27x1	
Features		
Model	<i>piShaper 5_6_262</i>	<i>piShaper 5_6_VIS</i>
Input beam features	Diameter 5,6 mm (1/e <sup>2</sup> )	Diameter 5,8 mm (1/e <sup>2</sup> )
Output beam	Diameter 5,8 mm	Diameter 6 mm
Optimum wavelength range*	250-270 nm	340-560 nm
Design wavelengths	258-266 nm	355-532 nm
Applications based on	4 <sup>th</sup> Harmonics Nd:YAG other UV lasers	2 <sup>nd</sup> , 3 <sup>rd</sup> Harmonics Nd:YAG other lasers of UV and visual range
* - according to coatings applied		

