

Focal- π Shaper NA 0.1 / 0.06

***High efficient Collimating - Beam Shaper
converting Gaussian to Flat-top profile of
high power TEM₀₀ fiber lasers***



With these unique tools manipulating the shape of focused beams becomes a reality.

With nearly 100% efficiency the ***Focal- π Shaper*** produces various profiles:

- Flat-top
- "Inverse Gauss"
- "Doughnut"

An appropriate optical design provides simple adjustment procedure and lets it easy to integrate the ***Focal- π Shaper*** in your applications:

- Microwelding
- Drilling
- Selective Laser Melting
- Material micromachining
- Laser Heating in Geophysical researches
- Marking and Engraving
- Scribing
- Cutting
- Printing

Beam Shaping never was so easy!

Technical Specifications

Type	Collimator, without internal focus
Input beam	<ul style="list-style-type: none"> • TEM₀₀, M²<1.4 • Divergent
Output beam	<ul style="list-style-type: none"> • Collimated or low divergence • Profile optimized to manipulate intensity distribution near focus of a diffraction limited focusing lens • Diameter < 20 mm
Spectral range	1020 – 1100 nm
Laser Power	up to 2 kW (CW)
Other features	<ul style="list-style-type: none"> • Water cooling • Adapted to operate with fiber lasers • QBH connector compatible • Compact design suitable for industrial applications • Operation with diffraction limited focusing lenses of any type • Easy alignment • Optimized to work with scanning optics: mirror scanners, F-θ lenses
Overall dimensions	<ul style="list-style-type: none"> • Diameter 77 mm • Length 130 mm
Weight	650 g
Mounting	Input (fiber side): inner thread M 30x0.75, 5-axis QBH mount Output: outer thread M 30x0.75

Focal-πShaper features

Model	Focal-πShaper NA0.1_50_80_1064	Focal-πShaper NA0.06_50_80_1064
Input divergence 2θ (1/e ²), rad	0.2-0.24	0.1-0.12

