

Focal- π Shaper NA 0.1_50_80_1064

***Highly efficient Collimator - Beam Shaper
converting Gaussian to Flattop profile for
high power TEM₀₀ fiber lasers***



With these unique tools the long-standing wish to manipulate the shape of focused beams becomes a reality.

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

- Flattop
- "Inverse Gauss"
- "Donut"
- "Trident", etc.

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

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 • Divergence 2Θ = 0.2-0.24 rad, NA = 0.1-0.12 (1/e²)
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 • Compact design suitable for industrial applications • Mechanical design is compatible with QBH fiber holder • A diffraction limited focusing lens of any type can be applied with the F-πShaper • Easy tolerances for alignment as well as positioning of the F-πShaper with respect to a lens • Capability to work with scanning mirrors
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 Output: outer thread M 30x0.75

