

# peaXXus

## Lossless beam splitting with variable energy distribution

### Applications:

- Welding
- Cladding
- Brazing

### Features:

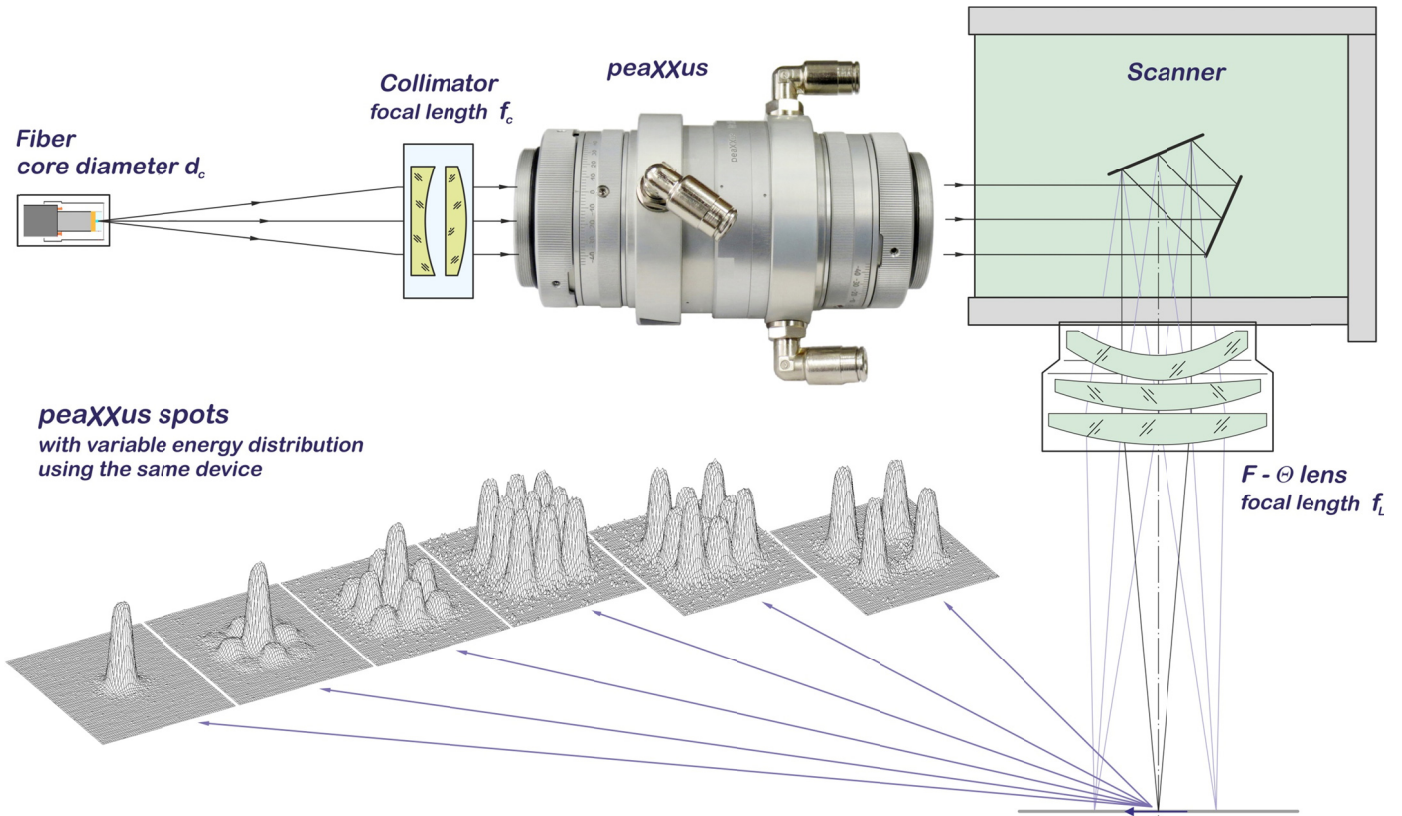
- Splitting in 9 spots
- High transmission
- Lossless operation
- CA 30 mm
- TEM<sub>00</sub> and multimode lasers
- Power up to 6 kW
- Reduced thermal effects
- Operation with scanners
- Various wavelengths



### Specifications

Common for peaXXus optics				
Description		<ul style="list-style-type: none"> <li>• lossless beam splitting in several foci perpendicular to axis</li> <li>• to be applied between a Collimator and a Focusing Lens</li> <li>• can be used with scanning optics</li> <li>• variable energy distribution in the peaXXus-spot</li> <li>• independence of operation from beam quality and size</li> </ul>		
Number of foci		9		
peaXXus-spot layout		Square matrix		
Input		Collimated or low divergent/convergent beam		
Clear aperture		30 mm		
Laser		TEM <sub>00</sub> or multimode, any M <sup>2</sup> or BPP, any beam size within clear aperture		
Maximum laser power		6 kW		
Spectrum		<ul style="list-style-type: none"> <li>• near-IR 950-1100 nm</li> <li>• visible, incl. 450 nm</li> </ul>		
Angular field of view		± 3°		
Adjustment rings		Scale with 2° step, fixation using a screw		
Water cooling		by 6-1/8 fittings		
Diameter		71 mm		
Length		135.5 mm		
Mounting		External threads M47 x 0.75 entrance and exit		
Features				
peaXXus		<u>_1.8_sq_D30_1070</u>	<u>_1.25_sq_D30_1070</u>	<u>_0.9_sq_D30_1070</u>
Splitting angle	square side	full 1.84 mrad	full 1.22 mrad	full 0.92 mrad
	square diagonal	full 2.6 mrad	full 1.72 mrad	full 1.3 mrad
Spectral band		1065 – 1075 nm	1065 – 1075 nm	1065 – 1075 nm

Example of operation in optical system with scanning optics



Characteristic peaxXus–spots, by different settings

