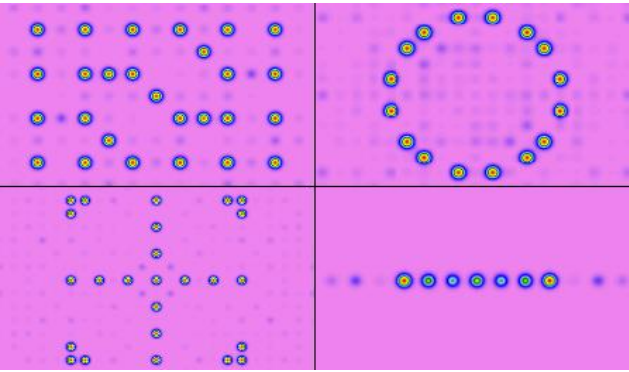
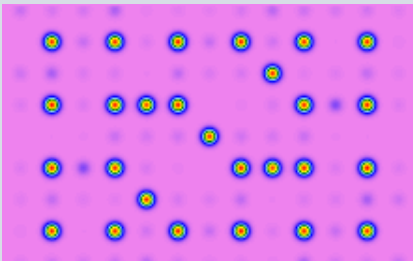


## Customized Diffractive Beam Splitter

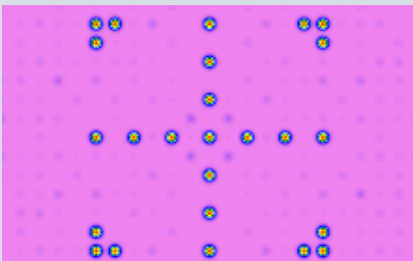


### SAMPLES

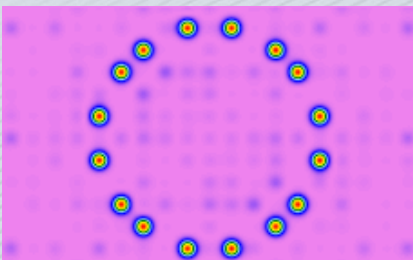
- ▲ Customized arrangement of the beams (pseudo random dot array)



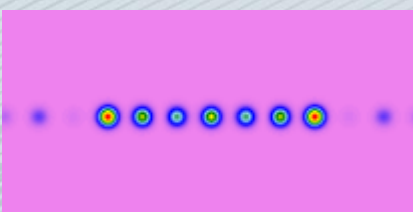
- ▲ Target cross or view finder as dot array



- ▲ Circular arrangement (dot circle) with different spot distances



- ▲ Beam splitter with different power levels of the separated beams



In addition to the standard diffractive beam splitters, TOPAG also manufactures customized beam splitters.

Firstly, we can modify our existing designs to meet the customer's requirements. The grating structure is adapted to a chosen wavelength and/or spot separation. It is also possible to vary the substrate dimension, the glass material and the coating type.

Secondly, we also design new beam splitters. These new designs can include a customized number and spatial arrangement of the spots. Moreover, it is possible to define a customer-specific ratio of power between the beams. Spot distances in a generated spot array can be different.

### CUSTOMIZATION OPTIONS

Wavelength	Each diffractive beam splitter is made for a fixed wavelength. We produce beam splitters for wavelengths from 200 nm to 4 μm (UV – VIS – NIR)
Separation angle	Max.: $\arcsin(\lambda/(6\mu\text{m} \cdot \text{number of spots}))$ Min.: $\arcsin(3 \cdot \lambda/\text{beam diameter})$
Material	Fused silica, other materials on request (i.e. BK7 or sapphire).
Dimensions	Dia. 1 inch, thickness 3 mm. Other dimensions on request.
Coating type	With antireflection (AR/AR) coating. Special AR coatings for higher damage thresholds are possible. Optionally with different coatings, i.e. partial or high reflective.
Spot number	Can be matched to your application.
Spot arrangement	
Spot modulation	
Multifunctional	Multiple or spatially variable splitter design on one substrate.

Please contact us for your specific beam splitter.