

Beam Homogenizer / Optical Diffuser

Holo/Or has vast variety of solutions for beam homogenizing and beam shaping:

Using our Beam Homogenizer product, you can convert any collimated input beam profile into a well-defined beam with homogenized intensity. Any desired shape, for any wavelength can be achieved.

A Beam Homogenizer is very useful in many applications requiring a well-defined beam shape with a randomly-diffused intensity profile.

The output of the Beam Homogenizers will depend on the input beam profile:

A multi-mode laser beam actually has an advantage when used with beam homogenizer, as their degraded coherence will reduce the visibility of speckles and therefore create a more uniform intensity profile than with single mode laser input.

Features:

- Works with single or multi mode input beams
- Glass or plastic materials
- Low centration requirement
- Any output shape or symmetry
- Uniform/Tailored intensity profile

Applications:

- Laser homogenizing/shaping
- Laser material processing: perforation, ablation, drilling, marking, scribing and welding
- Medical/aesthetic laser treatment
- Beam shaping for Excimer lasers
- Hot spot reducer

General Specifications

Materials:	Fused Silica, ZnSe, Plastic
Wavelength range:	193nm to 10.6um
DOE design:	2-level (binary) to 16-level
Diffraction efficiency:	75% - 98%
Element size:	Few mm to 100mm
Coating (optional):	AR/AR Coating
Custom Design:	Tailored shape and intensity distribution
Pattern angles @532nm:	Few mRad to 160deg

Homogenizer products (1064nm)

型号	激光波长 [nm]	角度° [deg]	光斑尺寸 [mm] EFL=100mm	透镜尺寸 [mm]	激光 光斑形状	备注	库存情况
DF-200-I-Y-A	1064	0.50x0.50	0.87x0.87	11	正方形	replaced by HM-283	In Stock*
XH-201-I-Y-A	1064	2.15	3.75	18	六边形	High Homogeneity	In Stock*
RH-215-I-Y-A	1064	4	6.98	25.4	圆形	High Homogeneity	In Stock*
RD-228-I-Y-A	1064	0.5	0.87	11	圆形		In Stock*
RD-216-I-Y-A	1064	1.6	2.79	25.4	圆形		In Stock*
RD-215-I-Y-A	1064	4	6.98	25.4	圆形		In Stock*
RD-211-I-Y-A	1064	0.5	0.87	11	圆形	Multimode Laser	In Stock*
RD-206-I-Y-A	1064	2	3.49	11	圆形		In Stock*
RD-204-I-Y-A	1064	2	3.49	25.4	圆形		In Stock*
HD-200-I-Y-A	1064	2.15	3.75	18	六边形		In Stock*
RD-203-I-Y-A	1064	0.5	0.87	25.4	圆形		In Stock*
HM-283-I-Y-A	1064	0.50x0.50	0.87x0.87	11	正方形		In Stock*
HM-274-I-Y-A	1064	20.00x20.00	35.27x35.27	10x10	正方形		In Stock*
HH-214-I-Y-A	1064	2.00x2.00	3.49x3.49	11	正方形	High Homogeneity	In Stock*
HM-200-I-Y-A	1064	0.50x0.50	0.87x0.87	11	正方形	replaced by HM-283	In Stock*
HM-201-I-Y-A	1064	0.50x0.50	0.87x0.87	25.4	正方形	replaced by HM-272	In Stock*
HM-203-I-Y-A	1064	2.00x2.00	3.49x3.49	25.4	正方形	replaced by HM-271	In Stock*
HM-208-I-Y-A	1064	2.75x2.75	4.80x4.80	25.4	正方形		In Stock*
HM-210-I-Y-A	1064	2.00x2.00	3.49x3.49	11	正方形	replaced by HM-284	In Stock*
HM-211-I-Y-A	1064	2.00x2.00	3.49x3.49	25.4	正方形	replaced by HM-271	In Stock*
HM-212-I-Y-A	1064	0.50x0.50	0.87x0.87	25.4	正方形	replaced by HM-272	In Stock*

HM-213-I-Y-A	1064	1.00x1.00	1.75x1.75	22	正方形	High Efficiency	In Stock*
HM-260-I-Y-A	1064	2	3.49	25.4	Line		In Stock*
HM-273-I-Y-A	1064	10.00x10.00	17.50x17.50	10x10	正方形		In Stock*
HM-288-I-Y-A	1064	0.50x0.50	0.87x0.87	38.1	正方形		Standard
RH-218-I-Y-A	1064	2	3.49	18	圆形	High Homogeneity	Standard
ED-207-I-Y-A	1064	1.71x0.84	2.98x1.47	25.4x25.4	Elliptical		Semi-Std
HM-271-I-Y-A	1064	2.00x2.00	3.49x3.49	25.4	正方形		Semi-Std
HM-272-I-Y-A	1064	0.50x0.50	0.87x0.87	25.4	正方形		Semi-Std
HM-262-I-Y-A	1064	0.5	0.87	25.4	Line		Semi-Std
HH-211-I-Y-A	1064	2.00x2.00	3.49x3.49	25.4	正方形	High Homogeneity	Semi-Std
HM-276-I-Y-A	1064	1.00x1.00	1.75x1.75	25.4	正方形		Semi-Std
HM-281-I-Y-A	1064	2	3.49	11	Line		Semi-Std
HH-209-I-Y-A	1064	20.00x20.00	35.27x35.27	10x10	正方形	High Homogeneity	Semi-Std
DF-205-I-Y-A	1064	0.50x0.50	0.87x0.87	25.4	正方形	High Efficiency	Semi-Std
HM-285-I-Y-A	1064	0.36x0.66	0.63x1.15	25.4	长方形		Semi-Std
HM-286-I-Y-A	1064	22.9	40.51	7.25x7.25	Line		Semi-Std
HM-263-I-Y-A	1064	0.5	0.87	11	Line		Semi-Std
HM-289-I-Y-A	1064	1	1.75	11	Line		Semi-Std
HM-290-I-Y-A	1064	4.00x4.00	6.98x6.98	11	正方形		Semi-Std
HM-291-I-Y-A	1064	4	6.98	11	Line		Semi-Std
HM-303-I-Y-A	1064	3.60x14.40	6.29x25.27	15	长方形		Semi-Std
HM-307-I-Y-A	1064	0.50x0.50	0.87x0.87	25.4	正方形	High Efficiency	Semi-Std
ML-001-I-Y-A	1064	81.59x81.59	172.60x172.60	20x20	MultiLines	15 Lines	Semi-Std
RD-202-I-Y-A	1064	0.6	1.05	25.4	圆形	High Efficiency	Semi-Std
HH-208-I-Y-A	1064	2.75x2.75	4.80x4.80	25.4	正方形	High Homogeneity	Semi-Std
HM-264-I-Y-A	1064	0.60x0.60	1.05x1.05	25.4	正方形		Semi-Std
ED-206-I-Y-A	1064	3.80x2.92	6.63x5.10	25.4	Elliptical		Semi-Std
RD-208-I-Y-A	1064	16	28.11	11	圆形		Semi-Std
ED-205-I-Y-A	1064	2.76x1.87	4.82x3.26	25.4	Elliptical		Semi-Std
RD-213-I-Y-A	1064	0.5	0.87	11	圆形		Semi-Std
ED-204-I-Y-A	1064	1.71x0.84	2.98x1.47	25.4	Elliptical		Semi-Std
ED-203-I-Y-A	1064	1.23x0.79	2.15x1.38	25.4	Elliptical		Semi-Std
RD-220-I-Y-A	1064	0.33	0.58	11	圆形		Semi-Std
RD-221-I-Y-A	1064	0.16	0.28	11	圆形		Semi-Std
RD-222-I-Y-A	1064	0.16	0.28	15	圆形		Semi-Std
RD-226-I-Y-A	1064	27.4	48.75	15x15	圆形		Semi-Std
RD-227-I-Y-A	1064	1	1.75	25.4	圆形		Semi-Std
ED-202-I-Y-A	1064	1.23x0.79	2.15x1.38	11	Elliptical		Semi-Std
RD-232-I-Y-A	1064	2	3.49	11	圆形	M-Shape	Semi-Std
RD-231-I-Y-A	1064	1	1.75	20	圆形		Semi-Std
RD-235-I-Y-A	1064	0.14	0.24	11	圆形		Semi-Std

RH-206-I-Y-A	1064	2	3.49	11	圆形	High Homogeneity	Semi-Std
ED-201-I-Y-A	1064	1.23x0.79	2.15x1.38	15	Elliptical		Semi-Std
RH-217-I-Y-A	1064	2	3.49	25.4	圆形	High Homogeneity	Semi-Std
HM-267-I-Y-A	1064	8	13.99	48	Line		Semi-Std
RH-220-I-Y-A	1064	4	6.98	20	圆形	High Homogeneity	Semi-Std
RH-221-I-Y-A	1064	27.4	48.75	15x15	圆形	High Homogeneity	Semi-Std
HM-284-I-Y-A	1064	2.00x2.00	3.49x3.49	11	正方形		Semi-Std