

41520 Microlens Array.

- True 100% fill factor
- Broad wavelength range; 350 to 2500 nm
- Variety of standard lenses
- Inexpensive custom designs

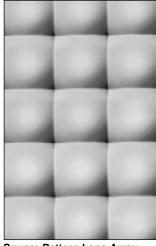
Oriel strives to furnish our customers with the latest in photonics technology, both modern instruments and innovative optical components. Our **new** Microlens Arrays fall into the second category. The lenses listed on this page can be used in a wide variety of applications; for example:

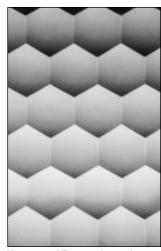
- Beam homogenizing
- Fiber coupling
- Brightening of miniature displays
- Efficiency improvements in focal plane arrays

Each microlens array comes centered on a 1 inch (25.4 mm) diameter glass substrate. Here we offer a variety of standard products for experimentation or development, plus we can provide economical custom pieces in larger quantities. Please call an Applications Engineer to discuss your particular specifications.

Table 1 Index of Refraction of Lens Material

Wavelength	Index of Refraction (n)
589 nm	1.564
632.8 nm	1.558
1.06 µm	1.546
1.3 µm	1.542
1.55 μm	1.540





Square Pattern Lens Array.

Hexagonal Pattern Lens Array.

SQUARE OR HEXAGONAL

We offer two array patterns, in various array sizes. The photographs above show a close-up of the two patterns.

MOUNTING

These lens arrays mount in any 1.0 inch (25.4 mm) diameter lens mount; see pages 18-17 to 18-23 for optic holders

SPECIFICATIONS

Substrate diameter: 1 inch (25.4 mm)
Substrate thickness: 0.12 inches (3 mm)
Substrate material: BK-7 glass

Lens material: Optical epoxy, UV cured Transmittance: >90% 350 nm to 2500 nm

Operating temperature: -45 to 200 °C

ORDERING INFORMATION

Lens Format	Center To Center Spacing (µm)	Focal Length @589 nm (µm)	Array Size (Elements)	Model No.	Price (\$)
Square	24	48	32 x 32	41520	\$ 397.00
	50	100	200 x 200	41521	\$ 397.00
	50	200	200 x 200	41522	\$ 397.00
	120	360	64 x 64	41523	\$ 397.00
	120	720	64 x 64	41524	\$ 397.00
	200	600	50 x 50	41525	\$ 397.00
Hexagonal	50	150	50 x 50	41526	\$ 397.00
	100	200	20 x 20	41527	\$ 397.00
	100	400	20 x 20	41528	\$ 397.00
	200	500	50 x 50	41529	\$ 397.00
	200	1000	50 x 50	41530	\$ 397.00