



The POC Advantage:

- Superior image resolution compared to GRIN lenses
- Diameter as small as 0.37 mm
- Lens design for both CMOS and fiber bundle

Micro Lenses

Ground & Polished Micro Lenses

With 30 years experience in the optics industry, we have developed capabilities to produce lenses as small as 0.37mm for use in micro optical systems including endoscope objectives with field of view as large as 120°. Our specially trained optics designers and technicians developed new processes and techniques for production of micro lenses. Products and systems requiring optical surfaces < 2mm in diameter often result in a tradeoff involving quality, price, or supply. At Precision Optics we can produce lenses to sizes as small as 0.37mm in diameter by using our proprietary microprecision™ technology with the quality of precision ground and polished lenses approaching the cost of gradient index (GRIN) lenses.

We provide complete objectives for both coherent fiberscopes and CMOS sensors, including the smallest diameter endo-scopes. In addition, we welcome the challenge to quote your most complex and demanding lens design. Please send your specifications to info@poci.com.

Coherent Fiber Bundle Lens Designs					
POC Part Number	Lens Diameter	Image Diameter	Lens Length	Field of View	Depth of Field
5262-750	0.37 mm	0.32 mm	1 mm	70°	3 mm-50 mm
5301-750	0.37 mm	0.32 mm	0.8 mm	90°	3 mm-50 mm
5262-751	0.57 mm	0.45 mm	1.4 mm	70°	3 mm-50 mm
5310-750	0.68 mm	0.58 mm	1.3 mm	100°	3 mm-50 mm
5262-752	0.83 mm	0.73 mm	1.6 mm	70°	3 mm-50 mm
5337-750	1.22 mm	0.80 mm	2.3 mm	95°	3 mm-50 mm

CMOS Lens Cells for OmniVision OV6930 CMOS Sensor						
POC Lens Cell Part Number	POC Assembly/ Outline Drawing Number	Field of View	f/ #	Depth of Field (estimate)	Lens Cell (mm)	Front Cell Surface to Sensor Cover Glass
5332-801	5332-902-1	88 horiz. (110 Oct mask)	8.5	1-50 mm	1.91	4.7
5347-801	5347-900-1	107 horiz. (Round mask)	7.2	3-50 mm	1.91	4.2
5347-801	5347-900-2	112 Horiz. (Round mask)	7.2	10-150 mm	1.91	4.1
5347-802	5347-901	112 Horiz. (Round mask)	7.2	10-150 mm	1.91	4.5
5360-801	5360-900	80 Horiz. (124 corner)	4	10-150 mm	1.91	5.6

We carry select sizes of micro objectives as catalog items for convenient ordering.