OCULAR INSTRUMENTS
PRODUCT CATALOG

See beyond the surface. Ocular® Instruments

Vision

It is both our business and our guiding principle. For over 40 years we have stayed focused on a single ideal: to create and produce ophthalmic lenses of unparalleled sharpness and clarity.

And while we have continually challenged ourselves to create breakthrough lens systems that take the forefront of the ophthalmic industry, we are at the same time committed to continually improving the features and durability of all our product lines.

Our personal focus, however, has always been clearly on you. We are not just driven. We are customer driven.

We believe our quest for higher performance and the pursuit of perfection is why so many leading doctors consistently choose the products of Ocular Instruments.

Ocular® Instruments

Latest Product Releases

Max360 Series

- Max360 Three Mirror Universal
- Max360 Magna View
- Latina 1X Indexing PSLT
- Latina 5 Bar Indexing SLT
- Hwang-Latina 5.0 Indexing SLT

Hill Open Access Surgical Gonio

Upright 1.3X Surgical Gonioprism

Swan Jacob 8mm A/C Gonioprism

Landers Wide Field Corneal Window

MaxAC® 20D Small

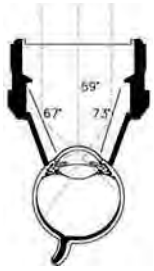
Reichel OCT Steady Eye

Vitreolysis Lens Sets

Ocular® Instruments

MAX360 SERIES

OCULAR MAX360 THREE MIRROR LENS



Our Three Mirror Universal lens now features our revolutionary rotating ring. Greatly improves rotational control while eliminating the need for two handed adjustments. Single hand rotation reduces procedure time by symplifying the process and significantly reduces lens decoupling. Bidirectional ergonomic 360 degree rotational ring with 12 clock hour positions for easy reference. Three mirrors angled at 59°, 67° and 73°. Anterior ring can be easily removed for cleaning . Available in three popular models: Standard, with Flange or NMR (no methylcellulose required).

Product Code	Style	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3MSA-IR	Universal	.93x	1.08x	18mm	34mm	140°
OG3MSA-2-IR*	NMR	.93x	1.08x	16mm	34mm	140°
OG3MSFA-IR	with flange	.93x	1.08x	20mm	35mm	140°

U.S. Patent #8,861,061

* No methylcellulose required

OCULAR MAX360 MAGNA VIEW GONIO LENS

The best lens available for gonioscopy and laser trabeculoplasty, now features our revolutionary rotating ring. This 1.3x magnified gonio lens indexes in 8 positions for 45 degree positioning. Effortless single handed rotation reduces procedure time by symplifying the process and significantly reduces lens decoupling. Large bright image is one of the most recommended lenses for anterior chamber angle digital photgraphy. Bidirectional ergonomic 360 degree rotational ring. One 62°mirror. Suitable for Argon/Diode or YAG laser treatment.

Product Code	Gonio Mag.	Gonio Laser Spot Mag	Contact Diam.	Lens Height	Static Gonio FOV
OMVGLF-IR	1.3x	.77x	18mm	24.5mm	160°

U.S. Patent #8,861,061

OCULAR LATINA 1X INDEXING PSLT LENS

Latina 1X Pattern Scanning Laser Trabeculoplasty (PSLT) lens featuring our revolutionary integrated indexing ring. Provides a rotational reference for each pattern of laser spots. The lens "clicks" into 32 positions that coincide with the embedded reference bar within the lens. Anterior ring allows trouble free one handed rotation of the lens that provides a quick and precise location at each 11.25° of rotation. Can be used with all Selective Laser Trebeculoplasty procedures. The anterior ring can be easily removed for cleaning.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Field of View
OL1PLTF	1.0x	1.0x	18mm	34mm	130°

U.S. Patent #7,766,480

U.S. Patent #8,861,061

OCULAR LATINA 5 BAR INDEXING SLT LENS

Latina SLT laser lens now features our revolutionary rotating ring. Integrated indexing ring provides rotational reference for each series of laser spots. The rotating ring locates in 10 positions that coincide with the 5 high contrast reference bars* embedded within the lens. Allows you to position or locate the laser spot and identify where to locate the next one with precision. Single handed rotation design eliminates the need to use both hands in repositioning the lens. Anterior ring can be easily removed for cleaning. Available with the Ocular Securefit® flange for increased stability.

**5 bars spaced 400 microns apart give visual reference for 10 laser spot locations*

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Field of View
OL5SLT-IR	1.0x	1.0x	14.5mm	33mm	130°
OL5SLTF-IR (w/flange)	1.0x	1.0x	18mm	34mm	130°

Designed with Mark A. Latina, MD, Reading, MA

U.S. Patent #7,766,480

U.S. Patent #8,861,061

OCULAR HWANG-LATINA 5.0 INDEXING SLT LENS

Hwang-Latina 5.0 SLT lens now features our revolutionary integrated indexing ring. Provides rotational reference for each series of laser spots. The ring "clicks" into 8 positions that coincide with the embedded high contrast reference bar within the lens. The reference bar provides a visual guide for placement of sub-threshold laser spots and identifies where to pinpoint the next one. Provides same easy estimation of a 45° section of the trabecular meshwork at width of 5mm, as the orginal Hwang-Latina 5.0 SLT. Available with the Ocular Securefit® flange for increased stability.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Field of View
OHLSLT-IR	1.0x	1.0x	14.5mm	33mm	130°
OHLSLTF-IR (w/flange)	1.0x	1.0x	18mm	34mm	130°

Designed with Sungjun Hwang, MD, Canandaigua, NY

U.S. Patent #7,766,480

U.S. Patent #8,861,061

SURGICAL GONIOPRISM

OCULAR HILL OPEN ACCESS SURGICAL GONIO

Perfectly suited for MIGS, Goniotomy and Direct viewing surgical gonioscopy procedures, the Open Access Design gives increased clearance to the clear cornea. Particularly useful for patients with smaller eye structures where the traditional Hill may press on or even cover the incision site. Also excellent choice when the procedure calls for insertion devices requiring additional corneal access. Steam sterilizable. Available in both left hand and right hand versions.

Product Code	Gonio Mag.	Surface Area	Static FOV	Handle Length
OHSOG-LH (held in left hand)	1.20x	54mm	90°	78mm
OHSOG-RH (held in right hand)	1.20x	54mm	90°	78mm

OCULAR UPRIGHT 1.3X SURGICAL GONIOPRISM

Perfectly suited for MIGS, Goniotomy and Direct viewing surgical gonioscopy procedures WITHOUT TILTING the microscope head! Very good image resolution and magnification. The small size and upright view allow a full 360 degree view of the anterior chamber angle by simply rotating the lens. Excellent choice for anterior chamber inspection during vitrectomy surgery or for delicate ab interno surgical glaucoma procedures. Steam sterilizable. Handle can be disassembled for cleaning and disinfection.

Product Code	Gonio Mag.	Contact Diam	Static FOV	Handle Length
OUSG-1.3X-H	1.30x	11.2mm	45°	78mm

Patent Pending

OCULAR SWAN JACOB 8MM AUTOCLAVABLE GONIOPRISM

Popular Swan Jacob Gonioprism lens with an 8mm diameter contact. Suitable for laboratory animals and pediatrics. Produces a hi-resolution image of the anterior chamber angle. Designed for direct viewing gonioscopy and goniotomy. Small size makes this lens useful for pediatric postoperative gonioscopy. Anodized aluminum handle for easy manipulation. Glass optic with stainless steel and aluminum design is steam sterilizable.

Product Code	Gonio Mag	Contact Diameter	Handle Length
OSJAG8	1.50x	8mm	89mm

ADDITIONAL PRODUCT RELEASES

OCULAR LANDERS WIDE FIELD CORNEAL WINDOW

Effectively shows a wide field view of the posterior segment during vitreoretinal surgery and is not limited by the need to accomodate a central trunk . Allows for sealing trephine sizes 6-8.2mm in addition to irregular shaped corneal openings. May be used for more types of corneal trauma cases, including those with large, irregular wounds.

Product Code	Image Mag.	Contact Diam	Static FOV
OLTCW	2.30x	6-8.2mm	28°

Designed with Maurice B. Landers III, MD, Chapel Hill, NC

OCULAR MAXAC® 20D SMALL LENS

High resolution 20 diopter lens offered at the same comfortable diameter as our traditional 28D lens. More ergonomic than the traditional 20D* for smaller patients. Glass aspheric design features high transmittance glass for bright, clear images. STEAM AUTOCLAVABLE.

* Ocular Instruments 0I-20M clear aperature = 48mm

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-20AS	3.0x	.33x	40°	47mm	38.5mm	39g

OCULAR REICHEL OCT STEADYEYE

Designed to manually stabilize the eye for enhanced OCT images intra-operatively. Stabilizes the eye while eliminating small eye movements for greater OCT image resolution. Sized so that it can be used during vitrectomy procedures without interfering with infusion ports. Centers optical axis without interfering OCT view. Functional for children as well as adults. Steam sterilizable.

Product Code	Inner Diam.	Outer Diam	Handle Length
OROCTS	12.7mm	17.5mm	95mm

Designed with Elias Reichel, MD, Boston, MA

OCULAR VITREOLYSIS LENS SETS

Custom walnut wood case sets for the Karickhoff and Peyman Wide Field Vitreous lenses. Two lens set contains the Ocular Karickhoff 21mm Vitreous and 30mm Vitreous Off-Axis lenses. Three lens set contains the Ocular Peyman Wide Field Vitreous 18mm, Karickhoff 21mm Vitreous and 25mm Vitreous Off-Axis lenses.

Product Code	Description
OJK-2S	Vitreolysis Two Lens Set
OJK-3S	Vitreolysis Three Lens Set

Lenses also sold seperately, see pages 17 - 18.

Karickhoff
21mm Vitreous

Karickhoff
30 mm Vit. Off-Axis

Peyman WF
18mm Vitreous

Karickhoff
21mm Vitreous

Karickhoff
25mm Vit. Off-Axis

Ocular® Instruments

TABLE OF CONTENTS

COLOR-CODED REFERENCE TABS >

CE Products listed in this catalog are certified except Landers and Cobo Temporary Keratoprosthesis.

CATARACT

SECTION	LENS
Photocoagulation	Hoskins Nylon Suture Layden Suture Lysis Mandelkorn Suture Lysis Ritch Nylon Suture
Surgical	Double Mirror Surgical Gonio Mori Upright Surgical Gonio Osher Gonio Post Pole Osher Surgical Kit Swan Jacob Gonio Thorpe Gonio
Tonometers	Kasaby Barraquer
YAG Laser	Abraham Capsulotomy Mandelkorn Irid/Caps Peyman G Capsulotomy

CORNEA

SECTION	LENS
Surgical	Cobo Temp Kerato Landers WF Temp Kerato

GENERAL EXAMINATION

SECTION	LENS
Diagnostic	1X Four Mirror Autoclavable Gonio Four Mirror Autoclavable Gonio Fundus Four Mirror Mini Gonio Gaasterland 1X Four Mirror Gaasterland Four Mirror Gonio Karickhoff Khaw 1X Direct View Gonio Khaw 4D Direct View Gonio Koeppe Magna View Gonio Single Mirror Gonio Thorpe Four Mirror Gonio Three Mirror Three Mirror Autoclavable Three Mirror HD Two Mirror Gonio
Indirect Diag/Laser	BIO: Various Powers Slit Lamp: Various Powers
Photocoagulation	1.5X Magna View Gonio Four Mirror Mini Gonio Fundus Karickhoff Magna View Gonio Magna View Two Mirror Gonio Single Mirror Gonio Thorpe Four Mirror Gonio Three Mirror Three Mirror HD Two Mirror Gonio Yannuzzi Fundus

GLAUCOMA

SECTION	LENS
Diagnostic	1X Four Mirror Autoclavable Gonio Four Mirror Autoclavable Gaasterland 1X Four Mirror Gaasterland Four Mirror Gonio Karickhoff Khaw 1X Direct View Gonio Koeppe Magna View Gonio Posner Gonioprism Sussman Gonioprism Three Mirror Three Mirror HD Gonio Thorpe Four Mirror
Photocoagulation	1.5X Magna View Gonio Abraham Iridectomy Four Mirror Mini Gonio Gaasterland 1X Four Mirror Hoskins Nylon Suture Layden Suture Lysis Magna View Gonio Magna View Two Mirror Gonio Mandelkorn Suture Lysis Ritch Nylon Suture Ritch Trabeculoplasty Single Mirror Gonio Thorpe Four Mirror Gonio Three Mirror Three Mirror HD Two Mirror Gonio Wise Iridotomy
Surgical	Ahmed 1.5X Surgical Gonio Double Mirror Surgical Gonio Hill Surgical Gonioprism Hoskins-Barkan Goniotomy Khaw Surgical Gonioprism Ritch Panoramic Surgical Gonio Swan Jacob Gonio Wells Suture Manipulator
YAG Laser	Abraham Iridectomy Hwang-Latina SLT Gonio Latina SLT Gonio Latina 5 Bar SLT Gonio Magna View Gonio Goniometric Magna View Mandelkorn Irid/Caps Pollack Irid/Gonio

PEDIATRIC

SECTION	LENS
Diagnostic	Three Mirror 13mm Three Mirror 15mm Three Mirror 17mm HD 3 Mirror - All Magna View Gonio Four Mirror Mini Gonio Posner Gonioprism Sussman Gonioprism Koeppe Gonio 17mm
Indirect Diag/Laser	MaxField 20D Small MaxLight 28D MaxField 28D MaxField 30D MaxField 35D MaxField 40D Landers ROP Attachment Saxena Retinal Grid 428
Surgical	Ped Vitrectomy Set Flat Vitrectomy w/handle Peyman Ped Wide Field Khaw Surgical Gonio Swan Jacob Gonio Hoskins Barkan Gonio -1,-2
SLO	Staurenghi 13mm
Photocoagulation	Reichel-Mainster 1X-P ProRetina 120 Three Mirror 13mm Three Mirror 15mm Three Mirror 17mm HD 3 Mirror - All Magna View Gonio Four Mirror Mini Gonio

REFRACTIVE

SECTION	LENS
Tonometers	Barraquer

RESEARCH

SECTION	LENS
	Kaufman Gonio Mouse Fundus Mouse Gonio Rat Fundus Staurenghi WF SLO 13mm

RETINAL EXAM & LASER

SECTION	LENS
Diagnostic	Fundus Karickhoff Three Mirror Three Mirror HD
Indirect Diag/Laser	BIO: Various Powers Landers ROP Lens Attachment Saxena Retinal Grid 428 Saxena Retinal Grid 520 Slit Lamp: Various Powers
Photocoagulation	Fundus Karickhoff Mainster High Mag Mainster PRP 165 Mainster (Std) Focal/Grid Mainster Wide Field PDT PDT 1.6X ProRetina 120 Reichel-Mainster 1X Reichel-Mainster 2X Three Mirror Three Mirror HD Yannuzzi Fundus
SLO	Lee-Mainster SLO Staurenghi Wide Field

VITREO-RETINAL SURGERY

SECTION	LENS
Indirect Laser	20D, 28D Autoclavable Autoclavable Lens Stand
Surgical	Disposable Vitrectomy Hexagonal Handle Vitr Landers Biconcave Vitr Landers Vitr Ring System Landers WF Temp Kerato Machemer Magnifying Vitr Pediatric Vitrectomy Peyman-Green Vitr Peyman Pediatric Wide Field Peyman Wide Field Vitr Reichel Viscous Contact System Vitrectomy Lens Holder Vitrectomy Rings
Surgical Viewing Systems	Inverter Vitrectomy System Landers Equatorial Landers SVS Landers Wide Field Peyman-Wessels-Landers 132D Woldoff High Mag
Tonometers	Barraquer
YAG Laser	Karickhoff 21mm Vitreous Karickhoff Off-Axis Vitreous Peyman 12.5, 18, 25mm

RETINA LENS COMPARISON CHART

LENS		PRORETINA 120 PB[3]	REICHEL-MAINSTER 2X	PRP 165	PDT 1.6X	WIDE FIELD	REICHEL-MAINSTER 1X	(STANDARD) FOCAL/GRID[4]	PEDIATRIC REICHEL-MAINSTER 1X	HIGH MAG
IMAGE MAGNIFICATION		.50X	.50X	.51X	.63X	.68X	.95X	.96X	1.08X	1.25X
LASER SPOT MAGNIFICATION FACTOR[2]		2.00X	2.00X	1.96X	1.60X	1.50X	1.05X	1.05X	.93X	.80X
STATIC FIELD OF VIEW		120°	117°	165°	120°	118°	102°	90°	98°	75°
DYNAMIC FIELD OF VIEW		136°	142°	180°	133°	127°	133°	121°	126°	88°
RETINAL DISORDER[1]	PROCEDURE									
NVD, NVE or NVI	PRP, Clear Media	■■	■■	■■■	■■	■■	■■	■	–	–
NVD, NVE or NVI	PRP, Vitreous Hemorrhage	■■■	■■■	■■	■■■	■■■	■■	■	–	–
Macular Edema	Focal + Grid	■	■■	■	■	■	■■■	■■■	■■■	■■
CNV in ARMD or OHS	Focal	–	–	–	–	–	■■■	■■■	–	■■■
	PDT	■	■■■	■	■■■	■■■	■■■	■■■	–	■■■
Retinal Holes	Peripheral	■	■	■■■	■	■	■	–	–	–

■■■ OPTIMAL ■■ VERY USEFUL ■ USEFUL – NOT USEFUL

(1) NVD, NVE, NVI: neovascularization - disc, retina elsewhere, iris; CNV: choroidal neovascularization; ARMD: age-related macular degeneration; OHS: ocular histoplasmosis syndrome.

(2) Multiply the laser photocoagulator spot size setting by this magnification factor to calculate the retinal spot size produced by each lens.

(3) The ProRetina's tubular design facilitates examination and treatment of patients with prominent brows. It also allows easy lens manipulation for examination and treatment of the retinal periphery.

(4) Focal/Grid is the new name for the Mainster Standard.

ALL LASER LENSES USE CLEANING METHOD 1

OCULAR MAINSTER PRP 165

Widest field of view available for panretinal photocoagulation. Unique optical design provides clear, bright image across the entire field. Light weight. Securefit® flange for easy manipulation. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
OMRA-PRP-165	.51x	1.96x	17.5mm	28mm	165°	180°
OMRA-PRP-165-2*	.51x	1.96x	16.5mm	27.5mm	165°	180°

OCULAR MAINSTER WIDE FIELD

For panretinal photocoagulation in proliferative diabetic retinopathy. Excellent ophthalmoscopic resolution. Image binocularity across the entire field of view. Allows a very wide range of slit lamp magnifications to be used. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
OMRA-WF	.68x	1.50x	15.5mm	28mm	118°	127°
OMRA-WF-2*	.68x	1.50x	12mm	26.5mm	118°	127°

Journal references: AJO, Vol. 117, pp 442-446, April 1994
American Academy of Ophthalmology, Vitreoretinal Update, Subspecialty Day 1999

OCULAR REICHEL-MAINSTER 1X RETINA

Superior optical resolution for detecting subtle fundus details such as retinal thickening and serous detachments. High axial and lateral magnifications facilitate the diagnosis and treatment of macular and retinal vascular disorders. Broad field of view provides versatility for focal, grid and panretinal photocoagulation. Ideal for photodynamic therapy and for treating choroidal neovascularization, diabetic retinopathy and retinal vascular occlusion.The ORMR-1X-P has a smaller contact diameter for pediatric patients. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

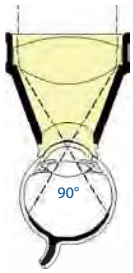
Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
ORMR-1X	.95x	1.05x	16.5mm	30mm	102°	133°
ORMR-1X-2*	.95x	1.05x	15mm	29.5mm	102°	133°
ORMR-1X-P	1.08x	.93x	15mm	31mm	98°	126°

Journal reference: Seminars in Ophthalmology, 2001, Vol. 16, No. 2, pp 60-65.

Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66. * No methylcellulose required

OCULAR MAINSTER (STANDARD) FOCAL/GRID

Designed for focal and grid laser treatment from the posterior pole to the mid-periphery. Excellent for diagnosis and treatment of macular edema, branch retinal vein occlusion, choroidal neovascularization in aging macular degeneration, and presumed ocular histoplasmosis. High resolution, high magnification image allows appreciation of subtle intra-retinal details and retinal thickening. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

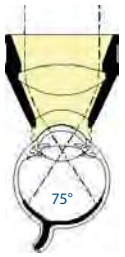


Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
OMRA-S	.96x	1.05x	15.5mm	32.5mm	90°	121°
OMRA-S-2*	.96x	1.05x	12mm	31mm	90°	121°

Journal references: Ophthalmology Times, Vol. 15, No. 18, Sep 15, 1990; British Journal of Ophthalmology, Vol. 74, No. 3, pp 177-179, Mar 1990; Archives of Ophthalmology, Vol. 106, p 1640, Dec 1988

OCULAR MAINSTER HIGH MAGNIFICATION

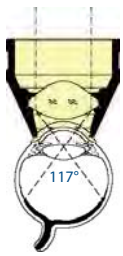
Very high magnification for detecting and treating macular problems. Facilitates location of subtle vascular landmarks during macular photocoagulation that may be apparent angiographically but are hard to find without superior magnification.



Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
OMRA-HM	1.25x	.80x	15.5mm	27.5mm	75°	88°
OMRA-HM-2*	1.25x	.80x	12mm	26.5mm	75°	88°

OCULAR REICHEL-MAINSTER 2X

Superior optical resolution for detecting subtle fundus details such as retinal thickening and serous detachments. Outstanding imaging performance through hazy ocular media. Broad field of view provides versatility for focal, grid and panretinal photocoagulation. Ideal for photodynamic therapy and for treating choroidal neovascularization, diabetic retinopathy and retinal vascular occlusion. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.



Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
ORMR-2X	.50x	2.00x	16.5mm	27.5mm	117°	142°
ORMR-2X-2*	.50x	2.00x	15.5mm	27mm	117°	142°

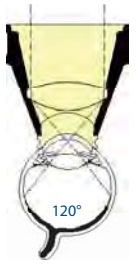
ALL LASER LENSES USE CLEANING METHOD 1 * No methylcellulose required

OCULAR PRORETINA 120 PB

High resolution aspheric design for panretinal photocoagulation. Streamlined shape simplifies treatment of patients with prominent brows and allows easy lens manipulation to examine and treat the retinal periphery. The shape and features of this lens compares to the traditional Rodenstock Pan Fundus Lens. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
OPR-120	.50x	2.00x	16mm	35.5mm	120°	136°

OCULAR PDT 1.6X



Exceptional lens for treatment of macular degeneration. Larger treatment area with high resolution. Unique design for ease of use and optimal image contrast. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV	Dynamic FOV
OPDT	.63x	1.60x	15.5mm	32.5mm	120°	133°
OPDT-2*	.63x	1.60x	12mm	31mm	120°	133°

OCULAR FUNDUS

This "Goldmann" type fundus lens provides clear visualization of the posterior pole. Using the NMR-K (Kapetansky) style contact surface design, direct examination and laser treatment of the posterior pole can be performed without methylcellulose.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV
OGFA	.93x	1.08x	15.5mm	16.5mm	36°
OGFA-2*	.97x	1.03x	15.5mm	16.5mm	35°

OCULAR YANNUZZI FUNDUS

Designed for viewing and treatment of the posterior pole. Large scleral flange allows greater control of the globe.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static FOV
OYFA	.93x	1.08x	20mm	16.5mm	36°

Journal reference: AJO, Vol. 101, No. 5, pp. 619-620, May 1986

Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR ABRAHAM IRIDECTOMY

A 66D magnifying lens for viewing the patient's iris. The power density of the laser beam at the iris is increased 2.5x compared with a flat lens. A 50 micron spot size setting yields a 31 micron spot on the iris. The lens provides additional safety by reducing the power density at the cornea and retina by 2.8x.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OAIA	1.60x	.63x	15.5mm	16.5mm

Journal references: Int'l Ophthalmology Clinic Glaucoma Surgery, Vol. 21, No. 1, Spring 1981; Ophthalmic Surgery, Vol. 11, No. 8, pp. 506-515, August 1980; Ophthalmic Surgery and Lasers, Vol. 27, No. 3, pp. 209-227, March 1996; Perspectives in Ophthalmology, Vol. 4, No. 2, pp. 129-138, June 1980

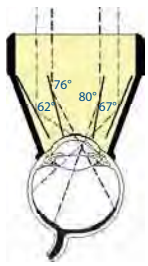
OCULAR WISE IRIDOTOMY-SPHINCTEROTOMY

This lens features a 9mm diameter, 103D magnifying lens strategically aligned to optimize small spot laser delivery. Laser power density at the iris is 2.7 times greater than with an Abraham lens and 6.9 times greater than with a flat lens. Increases treatment efficiency with less energy and shorter burn duration, even on thick brown or light blue irises. Useful with Argon/ Diode or Nd:YAG lasers.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OWISA	2.60x	.38x	15.5mm	15mm

Journal references: AJO, Vol. 101, No. 5, pp. 546-553, May 1986
Ophthalmic Surgery, Vol. 27, No. 3, pp. 209-227, March 1996

OCULAR KARICKHOFF



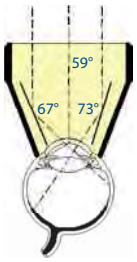
Four mirrors plus a central axis view give a complete view of the interior of the eye. Unique "depth dots" mark each mirror at the base for easy orientation. One dot, 62° (anterior chamber angle); two dots, 67° (ora serrata); three dots, 76° (mid-equator); four dots, 80° (mid-peripheral area). The mirrors provide fields of view that overlap completely. Gonio mag .80x. Gonio laser spot mag 1.25x.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OJKA	.93x	1.08x	18mm	30mm	140°
OJKFA (w/flange)	.93x	1.08x	20mm	32.5mm	140°

Journal references: Optometry Today Supplement, pp. 23-24, September 1992
Optometric Management, Vol. 35, No. 6, June 2000

ALL LASER LENSES USE CLEANING METHOD 1 * No methylcellulose required

OCULAR THREE MIRROR UNIVERSAL

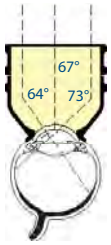


This classic "Goldmann" type lens has three mirrors angled at 59°, 67° and 73° to permit viewing of the fundus and anterior chamber. The posterior pole is viewed through the center of the lens. Many heights and diameters are available. Gonio mag .80x. Gonio laser spot mag 1.25x.

Product Code	Style	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3MA	Universal	.93x	1.08x	18mm	32mm	140°
OG3MA-2*	NMR	.93x	1.08x	16mm	32mm	140°
OG3MFA	with flange	.93x	1.08x	20mm	33mm	140°
OG3MIA	15mm	.93x	1.08x	15mm	28mm	140°
OG3MPA	17mm	.93x	1.08x	17mm	26mm	140°
OG3MSA	Short	.93x	1.08x	18mm	24mm	140°
OG3MSA-2*	NMR Short	.93x	1.08x	16mm	23mm	140°
OG3MA-13*	NMR Small Fissure	.93x	1.08x	13mm	28mm	140°

Journal reference: Optometric Management, Vol. 35, No. 6, June 2000
The Journal of Ophthalmic Photography, Vol. 26, No. 1, pp. 13-19, Spring 2004

OCULAR HIGH DEFINITION THREE MIRROR



Provides mirrors for examination of the fundus and the anterior chamber angle. High index glass three mirror lens with our Laserlight® HD anti-reflective coating for maximum light transmission and image brightness. One 64° gonio mirror and two fundus mirrors, 73° and 67°. Fundus images overlap, no “blind spot” in fundus field. Outstanding for laser and diagnostic applications – 15mm or 17mm flange adapters recommended for laser procedures. Compatible with visible and near infrared lasers. Methylcellulose not required.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3MHD-10*	.65x	1.54x	10mm	25.0mm	150°
OG3MHD-15*	.65x	1.54x	15mm	26.5mm	150°
(OG3MHD-10 Lens w/OACF-15 flange)					
OG3MHD-17	.65x	1.54x	17mm	27.5mm	150°
(OG3MHD-10 Lens w/OACF-17 flange; methylcellulose recommended)					

Flanges also sold separately, see accessory section.
U.S. Patent #6,767,098

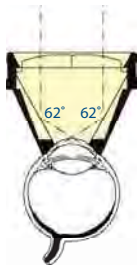
Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR MAGNA VIEW GONIO

The best lens available for gonioscopy and laser trabeculoplasty. One 62° mirror. Tilted anterior surface corrects image and laser beam astigmatism. Unsurpassed resolution. The best lens for anterior chamber angle photography. Can be used on most patients without methylcellulose. Suitable for Argon/Diode or YAG laser treatment. Available with the Ocular Securefit® flange.

Product Code	Gonio Mag.	Gonio Laser Spot Mag	Contact Diam.	Lens Height	Static Gonio FOV
OMVGL	1.3x	.77x	15mm	23.5mm	160°
OMVGLF (w/flange)	1.3x	.77x	18mm	24.5mm	160°

OCULAR MAGNA VIEW TWO MIRROR GONIO



In the same spirit as our popular single mirror design, the Two Mirror Magna View gives unsurpassed image resolution and magnification of the anterior chamber angle. The 1.45x gonio magnification provides fine detailed viewing of the anterior chamber angle structures. The second mirror reduces the amount of lens rotation needed to view the total 360° of the anterior chamber. Excellent lens for detailed high resolution digital and traditional photography. Laserlight® HD anti-reflective coating for maximum light transmission and image brightness. Available with the Ocular Securefit® Flange.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OMV2G	1.45x	.69x	15mm	26mm	160°
OMV2GF (w/flange)	1.45x	.69x	18mm	27mm	160°

OCULAR 1.5X MAGNA VIEW GONIO

This lens features an innovative all glass prism design that eliminates mirror coatings to give the brightest image possible. Only a prism utilizing a total internal reflection (TIR) mirror can deliver 100% of available light back to the observer. The Ocular 1.5X Magna View is based on this concept to provide the brightest image possible. This, coupled with the use of low dispersion glass, computer enhanced optical design, and our advanced Laserlight® HD anti-reflective coating, creates an exceptional gonio lens for diagnosis, treatments and digital documentation of the anterior chamber angle. Available with the Ocular Securefit® Flange.

Product Code	Gonio Mag.	Gonio Laser Spot Mag	Contact Diam.	Lens Height	Static Gonio FOV
OMVGL-1.5X	1.5x	.67x	14.5mm	25mm	120°
OMVGLF-1.5X (w/flange)	1.5x	.67x	15.5mm	25mm	120°

Patent Pending

ALL LASER LENSES USE CLEANING METHOD 1 * No methylcellulose required

NEW OCULAR GONIOMETRIC MV200

Magna View Gonio lens featuring a staircase shaped reference indicator that provides convenient reference to anterior chamber objects for longitudinal and comparative studies. Seven (7) stair steps imaged at approximately 200um in height. Excellent lens for digital photography and video. Available with the Ocular Securefit® flange.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OMVG200	1.3x	.77x	15mm	23.5mm	160°
OMVG200-2*	1.3x	.77x	15mm	23.5mm	160°
OMVGF200 (w/flange)	1.3x	.77x	18mm	24.5mm	160°

OCULAR SINGLE MIRROR GONIO

Small size gonio lens with one 62° mirror. Compact knurled ring simplifies 360° viewing and treatment of the anterior chamber angle. The -2 model with NMR-K (Kapetansky) style contact surface design allows gonioscopy and laser trabeculoplasty without methylcellulose. Available with the Ocular Securefit® flange.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OSMGA	.80x	1.25x	15mm	21mm	170°
OSMGA-2*	.80x	1.25x	15mm	21mm	170°
OSMGFA (w/flange)	.80x	1.25x	17mm	21.5mm	170°

Journal references: Ophthalmic Surgery, Vol. 19, No. 6, pp. 414-416, June 1988; Optometry Today Supplement, pp. 23-24, September 1992; Optometric Management, Vol. 35, No. 6, June 2000

OCULAR TWO MIRROR GONIO

Two opposing 62° mirrors provide a complete view of the anterior chamber angle with only a 180° lens rotation. Methylcellulose and NMR-K (Kapetansky) no methylcellulose designs available. Available with the Ocular Securefit® flange.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
O2MA	.80x	1.25x	15mm	21mm	170°
O2MA-2*	.80x	1.25x	15mm	20mm	170°
O2MFA (w/flange)	.80x	1.25x	17mm	21.5mm	170°

Journal reference: Optometric Management, Vol. 35, No. 6, June 2000

Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

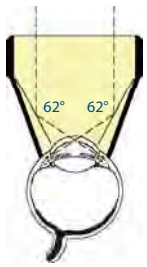
OCULAR FOUR MIRROR MINI GONIO

Four 62° mirrors allow complete observation of the angle with little lens rotation. Small diameter flange is convenient for eyes with small palpebral fissures. Anterior holding ring available in small and large sizes.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Ring Diam.	Static Gonio FOV
O4GFA*	.80x	1.25x	15mm	23.5mm	23.5mm	120°
O4GFA-LR*	.80x	1.25x	15mm	27mm	32.5mm	120°

Journal reference: Optometric Management, Vol. 35, No. 6, June 2000

OCULAR THORPE FOUR MIRROR GONIO

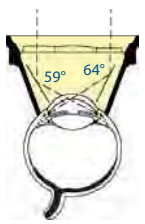


Four 62° mirrors give a 360° view of the anterior chamber angle with only a slight lens rotation. Posterior pole can be viewed through center of lens. Retina image mag .93x. Retina laser spot mag 1.08x.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OT4MGA	.80x	1.25x	18mm	32mm	150°

Journal reference: Optometric Management, Vol. 35, No. 6, June 2000

OCULAR RITCH TRABECULOPLASTY



Designed with two 59° (round on top) and two 64° mirrors (flat on top). A 1.4x magnifying button is placed over one each of the 59° and 64° mirrors. The magnifying button reduces the laser spot size by 30% and increases the laser power by 2x. The 64° mirror is best for treating the superior 180° of the angle, while the 59° mirror is best for the inferior 180°.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
ORTA	1.40x	.71x	18mm	23mm	80°

Journal reference: Review of Ophthalmology, Vol. 4, No. 6, pp. 97-100, June 1997

ALL LASER LENSES USE CLEANING METHOD 1 * No methylcellulose required

OCULAR MANDELKORN SUTURE LYSIS

Designed for laser suture lysis after trabeculectomy or cataract surgery. The lens compresses conjunctival blood vessels and provides a clear view of the sutures. Allows complete visualization of the surgical site.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OMSLA	1.32x	.76x	5.6mm	21mm

Journal references: Eye Net, Vol. 5, No. 4, pp. 33-34, April 2001; Ocular Surgery News, Vol. 13, No. 20, October 1995; Ocular Surgery News Int'l, Vol. 6, No. 10, p. 54, October 1995; Ophthalmic Surgery, Vol. 25, No.7, pp. 480-481, July 1994

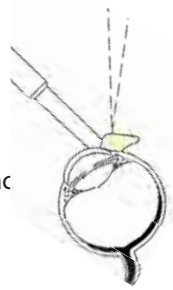
OCULAR RITCH NYLON SUTURE

Designed for laser suture lysis after trabeculectomy or cataract surgery. The lens compresses conjunctival blood vessels and provides a clear view of the sutures. Cone shaped lens with flange provides lid retraction.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
ORNSA	1.00x	1.00x	5.7mm	25.5mm

Journal references: Eye Net, Vol. 5, No. 4, pp. 33-34, April 2001
Ophthalmic Surgery, Vol. 25, No. 2, pp. 126-127, February 1994

OCULAR HOSKINS NYLON SUTURE



The Hoskins lens is designed for laser suture lysis after trabeculectomy or cataract surgery. The lens compresses conjunctival blood vessels and provides a clear view of the sutures. The flange holds the eye lid out of the way.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Handle Length
OHSA	1.20x	.83x	3mm	79mm

Journal references: AJO, Vol. 119, No. 2, pp. 232-233, February 1995; Eye Net, Vol. 5, No. 4, pp. 33-34, April 2001; Ophthalmic Surgery, Vol. 15, No. 9, pp. 731-733, September 1984; Ophthalmology, Vol. 103, No. 2, pp. 306-314, February 1996; Ophthalmology Times, Vol. 16, No. 9, May 1991; Ophthalmic Surgery & Lasers, Vol. 31, No. 2, pp. 94-99, March/April 2000

OCULAR LAYDEN SUTURE LYSIS LENS

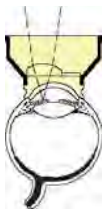
Designed for laser suture lysis after trabeculectomy or cataract surgery. The lens compresses the overlying conjunctival blood vessels and provides a clear view of the sutures. 1.6mm diameter tip simplifies locating and lasering sutures in patients with dark or highly pigmented sclera.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Handle Length
OLSA	1.00x	1.00x	1.6mm	79mm

Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR ABRAHAM IRIDECTOMY

A 10mm diameter, 66D magnifying button in the anterior surface of the lens is positioned over the peripheral iris to give a clear view of the iridectomy site. Laser efficiency is increased compared with using no lens. The lens also helps stabilize the patient's eye and retains the eye lids.



Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OAIY	1.5x	.67x	15.5mm	16.5mm

Journal reference: Ophthalmic Surgery & Lasers, Vol. 27, No. 3, pp. 209-227, March 1996

OCULAR ABRAHAM CAPSULOTOMY

Stabilizes the patient's eye and minimizes the possibility of pitting the IOL during Nd:YAG laser capsulotomy. A 10mm diameter, 66D magnifying button in the center of the lens enhances visualization and allows precise laser focus on the posterior capsule.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OAYA	1.8x	.56x	15.5mm	16.5mm

Journal reference: Ocular Surgery News, Vol. 14, No. 17, p. 36, September 1, 1996

OCULAR PEYMAN G. CAPSULOTOMY

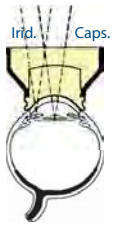
Designed for posterior capsulotomy, this lens features a 14mm diameter anterior surface and a slightly greater working distance than the Abraham Lens.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OPYG -12-12	1.8x	.56x	15.5mm	16.5mm

Journal reference: EyeNet, Vol. 5, No. 8, pp. 35-37, August 2001

ALL LASER LENSES USE CLEANING METHOD 1

OCULAR MANDELKORN IRIDOTOMY/CAPSULOTOMY

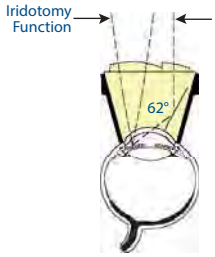


Large anterior surface allows visualization of the iris and posterior capsule. Designed for Argon/Diode or Nd:YAG iridotomy, and YAG capsulotomy. Also useful for peripheral iridoplasty procedures.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OMIC	1.2x	.83x	15.5mm	16.5mm

Journal reference: Ocular Surgery News, Vol. 16, No. 9, p. 67, September 1998

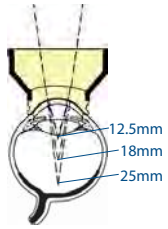
OCULAR POLLACK IRIDOTOMY/GONIO



The Pollack Iridotomy-Gonio Laser Lens has two coated glass buttons on the anterior surface that enable performance of iridotomy and gonioscopy without changing lenses and with minimal refocusing of the slit lamp. It is designed to easily determine if the angle has been opened following iridotomy. The 1.5x magnification button allows lower levels of energy to be employed during the procedure. Also suitable for Argon Laser Trabeculoplasty (ALT). Image mag is 1.5x for both iris and anterior chamber angle.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OPIG	1.5x	.65x	15mm	21mm

OCULAR PEYMAN WIDE FIELD



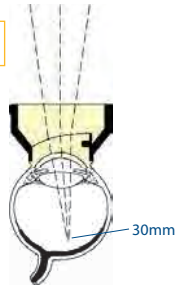
Three lenses designed for YAG laser treatment in the vitreous. 12.5mm for anterior vitreous, 18mm for mid-vitreous, 25mm for posterior vitreous. The convex anterior surface of each lens optimizes image magnification and laser performance in the area of interest.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OPY-12.5	1.40x	.71x	15.5mm	16.5mm
OPY-18	1.41x	.71x	15.5mm	16.5mm
OPY-25	1.36x	.74x	16mm	14.7mm

Journal reference: Retina, Vol. 4, No. 2, pp. 129-131, February 1984

Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

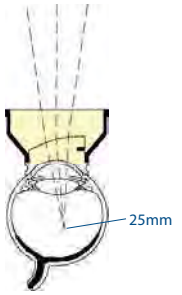
NEW OCULAR KARICKHOFF 30MM OFF-AXIS VITREOUS LENS



Used to vaporize floaters that are outside the central visual axis and are deep in the vitreous. Assists in vaporizing floaters that are behind the corneal knee in post-LASIK patients. This lens allows the beam to pass more through the central excavation (an optical surface) of the LASIK procedure for superior vaporization. Excellent for looking for additional floaters to treat. Instead of having the patient look in all directions, the surgeon simply slowly rotates the lens so that all directions are seen. Wider field than the Karickhoff Off-Axis 25mm lens (OJKPY-25).

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OJKPY-30	1.25x	.80x	15.5mm	16.5mm

OCULAR KARICKHOFF OFF-AXIS VITREOUS LENS

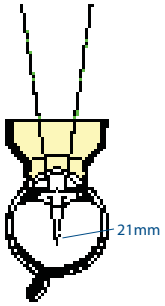


Lens very helpful in treating off-axis floaters. Rotating the lens allows looking for floaters without patient moving their eye. Focus is more posterior and allows monitoring of the retina during treatment in most patients. Black mark on lens indicates the direction of peripheral view. Anterior lens surface design reduces image astigmatism and image degradation when tilting the lens. Small flange prevents lens being squeezed off eye by patient.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OJKPY-25	1.36x	.74x	15.5mm	16.5mm

Journal reference: Ocular Surgery News, Vol. 25, No. 6, pp 51-54, March 15, 2007

OCULAR KARICKHOFF 21MM VITREOUS LENS



Most useful lens for laser treatment of vitreous floaters. Small flange helps prevent lens being squeezed off eye by patient. Small exterior diameter enables lens to be inserted into an eye with small lid fissures. Lens allows surgeon to view retina clearly in most patients during procedure to check for hemorrhage. Serrated holding ring for easy grip.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height
OJKY-21	1.39x	.72x	15.5mm	16mm

Journal reference: Ocular Surgery News, Vol. 25, No. 6, pp 51-54, March 15, 2007

ALL LASER LENSES USE CLEANING METHOD 1

NEW OCULAR LATINA 5 BAR SLT LENS

Latina SLT laser lens featuring five high contrast reference bars embedded into the contact portion of the lens are imaged over the trabecular meshwork and provide a reference to placement of sub-threshold laser spot. Available with the Ocular Securefit® flange for increased stability.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Field of View
OL5SLT	1.0x	1.0x	14.5mm	24mm	130°
OL5SLTF (w/flange)	1.0x	1.0x	18mm	25mm	130°

U.S. Patent #7,766,480

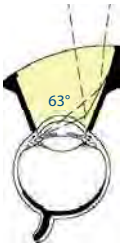
NEW OCULAR HWANG-LATINA 5.0 SLT LENS

High contrast reference bar embedded into the contact portion of the SLT lens and provides easy estimation of a 45° section of the trabecular meshwork. Imaged at width of 5mm, the reference bar can also be used to estimate the size of the anterior chamber angle structures. Available with the Ocular Securefit® flange for increased stability.

U.S. Patent #7,766,480

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Field of View
OHLSLT	1.0x	1.0x	14.5mm	24mm	130°
OHLSLTF (w/flange)	1.0x	1.0x	18mm	25mm	130°

OCULAR LATINA SLT GONIO LASER LENS



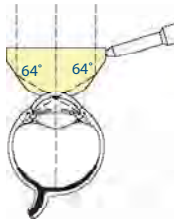
Designed specifically for Selective Laser Trabeculoplasty. 1.0x magnification maintains laser spot size for accurate laser energy delivery. Tilted anterior lens surface corrects astigmatism to maintain circular laser beam profile and give sharp images for examination. Suitable for Standard Laser Trabeculoplasty. Large 63° mirror yields bright image for angle photography. Available with the Ocular Securefit® flange for increased stability.

Product Code	Gonio Mag.	Gonio Laser Spot Mag.	Contact Diam.	Lens Height	Field of View
OLSLT	1.0x	1.0x	14.5mm	24mm	130°
OLSLTF (w/flange)	1.0x	1.0x	18mm	25mm	130°

Ocular Argon/Diode Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

Ocular Instruments offers many lens styles that cater to your personal preference. Our popular Posner and Sussman Four Mirror Gonio Lenses are available with red, blue, green, gold, purple, or traditional black handles and rings.

OCULAR POSNER DIAGNOSTIC AND SURGICAL GONIOPRISM

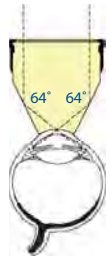


New handle design for strength and durability. Four 64° mirrors for complete anterior chamber angle viewing with minimal lens rotation. Choice of three handles set at 17° for ease of use. Small diameter contact surface allows static or dynamic gonioscopy without methylcellulose. Advanced technology, multi-layer polymer coating protects mirrors and is compatible with most disinfecting methods. Available with red, blue, green, gold, purple, or traditional black handle.

Product Code	Handle Style	Gonio Mag.	Contact Diam.	Lens Height	Handle Length	Static Gonio FOV
OPDSG*	Round	.80x	9mm	13mm	79mm	80°
OPDSG-2*	Hexagonal	.80x	9mm	13mm	72mm	80°
OPDSG-3*	Ergonomic	.80x	9mm	13mm	93mm	80°

Journal references: Ophthalmology Times, Vol. 4, No. 6, p. 8, June 1979
Optometric Management, Vol. 35, No. 6, June 2000

OCULAR SUSSMAN FOUR MIRROR HAND HELD GONIOSCOPE

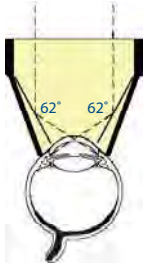


Four 64° mirrors for complete anterior chamber angle viewing with minimal lens rotation. Directly hand held for easy handling and stability. Choice of large or small holding ring. Small diameter contact surface allows static or dynamic gonioscopy without methylcellulose. Advanced technology, multi-layer polymer coating protects mirrors and is compatible with most disinfecting methods. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Ring Diam.	Static Gonio FOV
OS4M*	.80x	9mm	24.5mm	25mm	80°
OS4M-2*	.80x	9mm	28.5mm	31.5mm	80°

Journal reference: Optometric Management, Vol. 35, No. 6, June 2000.

OCULAR THORPE FOUR MIRROR GONIO

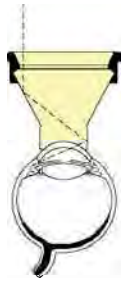


Four 62° mirrors give a 360° view of the anterior chamber angle with only a slight lens rotation. Posterior pole can be viewed through center of lens. Image mag .93x. Also available with our high performance anti-reflective coating. See page 14 for more details.

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OT4MG	.80x	18mm	32mm	150°

* No methylcellulose required

OCULAR KHAW 4D DIRECT VIEW GONIO



Traditional and 1X magnification versions available. The Khaw 4D Direct View Gonio Lenses combine the most favorable features of traditional gonioprisms while providing a properly orientated view of the angle. 360° of anterior chamber angle is visible with little to no lens rotation. Anterior chamber charting made easier with correct image orientation.
No methylcellulose required lens design.

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Ring Diam.	Static Gonio FOV
OK4DG*	.80x	10mm	24mm	28.5mm	170°
OK4DG-1X*	1.05x	10mm	23mm	28.5mm	150°

US Patent #6,976,758. Euro Patent #1 464 271

OCULAR GAASTERLAND FOUR MIRROR GONIO

Traditional and 1X magnification versions available. New Laserlight® HD anti-reflective coating on anterior surface for maximum image brightness and contrast. See Coatings and Materials (page 66) for more details. High Refractive Index glass provides total internal reflection even with fluid in contact with the mirrors. Larger field means no need to rotate lens to see entire anterior chamber angle. Choice of large or small holding ring. Also available with ergonomic handle. Lens is easily detached from handle for cleaning. Outstanding for laser and diagnostic applications – 15mm and 17mm flange adapters recommended for laser procedures. Compatible with visible and near infrared lasers. Methylcellulose not required.

Product Code	Gonio Mag.	Gonio Laser Spot Mag	Contact Diam.	Lens Height	Ring Diam.	Static FOV
OG4MG*	.61x	1.64x	8.5mm	22mm	24.5mm	90°+
OG4MG-15* (OG4MG lens w/OACF4-15 flange)	.61x	1.64x	15mm	24.5mm	24.5mm	90°+
OG4MG-17 (OG4MG lens w/OACF4-17 flange; methylcellulose recommended)	.61x	1.64x	17mm	25.5mm	24.5mm	90°+
OG4MG-LR*	.61x	1.64x	8.5mm	28mm	31.5mm	90°+
OG4MG-LR-15* (OG4MG-LR lens w/OACF4-15 flange)	.61x	1.64x	15mm	30mm	31.5mm	90°+
OG4MG-LR-17 (OG4MG-LR lens w/OACF4-17 flange; methylcellulose recommended)	.61x	1.64x	17mm	31mm	31.5mm	90°+
OG4MG-H*	.61x	1.64x	8.5mm	18mm	n/a	90°+
OG4MG-1X*	1.0x	1.0x	8.5mm	22mm	24.5mm	90°+
OG4MG-1X-15* (OG4MG-1X lens w/OACF4-15 flange)	1.0x	1.0x	15mm	24.5mm	24.5mm	90°+
OG4MG-1X-17 (OG4MG-1X lens w/OACF4-17 flange; methylcellulose recommended)	1.0x	1.0x	17mm	25.5mm	24.5mm	90°+
OG4MG-1X-LR*	1.0x	1.0x	8.5mm	28mm	31.5mm	90°+
OG4MG-1X-LR-15* OG4MG-1X-LR lens w/OACF4-15 flange)	1.0x	1.0x	15mm	30mm	31.5mm	90°+
OG4MG-1X-LR-17 (OG4MG-1X-LR lens w/OACF4-17 flange; methylcellulose recommended)	1.0x	1.0x	17mm	31mm	31.5mm	90°+
OG4MG-1X-H*	1.0x	1.0x	8.5mm	18mm	n/a	90°+

Flanges also sold separately, see accessory section. U.S. Patent #6,767,098

DIAGNOSTIC LENSES USE CLEANING METHOD 1 UNLESS OTHERWISE NOTED

* No methylcellulose required

OCULAR MAXFIELD® AC FOUR MIRROR GONIO

Traditional and 1X magnification versions available. High Refractive Index glass provides total internal reflection even with fluid in contact with the mirrors. Total internal reflection means no light absorption or loss by a mirror coating resulting in a brighter, clearer image. High resolution image of the anterior chamber angle. Steam sterilizable. Available with small or large holding ring. Also available with ergonomic handle. Lens is easily detached from handle for cleaning and sterilization. Cleaning Method 3. Gonioscopic solution is not required to provide optical interface. Purchase with or separately a 15mm or 17mm lens flange to eliminate the need to purchase additional lenses with dedicated flanges. Flange cover is easily removed from the lens for cleaning and sterilization.

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Ring Diam.	Static FOV
O4MAC*	.61x	8.5mm	22mm	24.5mm	90°+
O4MAC-15* (O4MAC lens w/OACF4-15 flange)	.61x	15mm	24.5mm	24.5mm	90°+
O4MAC-17 (O4MAC lens w/OACF4-17 flange; methylcellulose recommended)	.61x	17mm	25.5mm	24.5mm	90°+
O4MAC-LR*	.61x	8.5mm	28mm	31.5mm	90°+
O4MAC-LR-15* (O4MAC-LR lens w/OACF4-15 flange)	.61x	15mm	30mm	31.5mm	90°+
O4MAC-LR-17 (O4MAC-LR lens w/OACF4-17 flange; methylcellulose recommended)	.61x	17mm	31mm	31.5mm	90°+
O4MAC-H*	.61x	8.5mm	18mm	n/a	90°+
O4MAC-1X*	1.0x	8.5mm	22mm	24.5mm	90°+
O4MAC-1X-15* (O4MAC-1X lens w/OACF4-15 flange)	1.0x	15mm	24.5mm	24.5mm	90°+
O4MAC-1X-17 (O4MAC-1X lens w/OACF4-17 flange; methylcellulose recommended)	1.0x	17mm	25.5mm	24.5mm	90°+
O4MAC-1X-LR*	1.0x	8.5mm	28mm	31.5mm	90°+
O4MAC-1X-LR-15* (O4MAC-1X-LR lens w/OACF4-15 flange)	1.0x	15mm	30mm	31.5mm	90°+
O4MAC-1X-LR-17 (O4MAC-1X-LR lens w/OACF4-17 flange; methylcellulose recommended)	1.0x	17mm	31mm	31.5mm	90°+
O4MAC-1X-H*	1.0x	8.5mm	18mm	n/a	90°+

Flanges also sold separately, see accessory section. U.S Patent #6,767,098

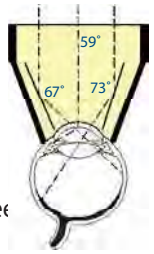
OCULAR FOUR MIRROR MINI GONIO

Four 62° mirrors allow complete observation of the angle with little lens rotation. Small diameter flange is convenient for eyes with small palpebral fissures. Anterior holding ring available in small and large sizes. Methylcellulose not required for most patients. Also available with our high performance, anti-reflective coating. See page 14 for more d

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Ring Diam.	Static Gonio FOV
O4GF*	.80x	15mm	22.5mm	23.5mm	120°
O4GF-LR*	.80x	15mm	26mm	32.5mm	120°

04MAC® LENSES USE CLEANING METHOD 3

OCULAR THREE MIRROR UNIVERSAL

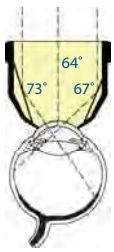


This classic "Goldmann" type lens has three mirrors angled at 59°, 67° and 73° to permit viewing of the peripheral fundus and anterior chamber angle. 36° of the posterior pole can be viewed through the center of the lens. Many heights and diameters are available. Gonio mag .80x. Also available with our high performance, anti-reflective coating. See page 9 for more details.

Product Code	Style	Image Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3M	Universal	.93x	18mm	32mm	140°
OG3M-2*	NMR	.93x	16mm	32mm	140°
OG3MF	with flange	.93x	20mm	33mm	140°
OG3MI	15mm	.93x	15mm	28mm	140°
OG3MP	17mm	.93x	17mm	26mm	140°
OG3MS	Short	.93x	18mm	24mm	140°
OG3MS-2*	NMR Short	.93x	16mm	23mm	140°
OG3M-13*	NMR Small Fissure	.93x	13mm	28mm	140°

Journal reference: The Journal of Ophthalmic Photography, Vol. 26, No. 1, pp. 13-19, Spring 2004

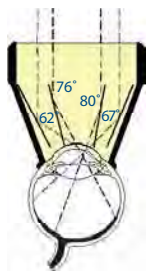
OCULAR THREE MIRROR 10MM GONIO



Three mirrors of 64°, 67° and 73° and a small diameter contact surface for use without methylcellulose. The fundus can be viewed through the central axis of the lens. Multi-layer polymer coating protects mirrors and is compatible with most disinfecting methods.
Gonio mag .80x.

Product Code	Image Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3M-10*	.93x	10mm	25mm	140°

OCULAR KARICKHOFF DIAGNOSTIC



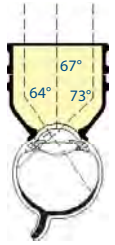
Four mirrors plus a central axis view give a complete view of the interior of the eye. Unique "depth dots" mark each mirror at the base for easy orientation. One dot, 62° (anterior chamber angle); two dots, 67° (ora serrata); three dots, 76° (mid-equator); four dots, 80° (mid-peripheral area). The mirrors provide fields of view that overlap completely. Gonio mag .80x. Also available with our high performance, anti-reflective coating. See page 9 for more details.

Product Code	Image Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OJK	.93x	18mm	29mm	140°
OJKF (w/flange)	.93x	20mm	30mm	140°

DIAGNOSTIC LENSES USE CLEANING METHOD 1 UNLESS OTHERWISE NOTED

* No methylcellulose required

OCULAR HIGH DEFINITION THREE MIRROR

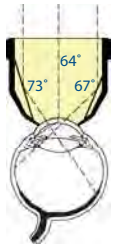


Provides mirrors for examination of the fundus and the anterior chamber angle. High index glass three mirror lens with our Laserlight® HD anti-reflective coating for maximum light transmission and image brightness. See Coatings and Materials (page 66) for more details. One 64° gonio mirror and two fundus mirrors, 73° and 67°. Fundus images overlap, no "blind spot" in fundus field. Outstanding for laser and diagnostic applications – 15mm or 17mm flange adapters recommended for laser procedures. Compatible with visible and near infrared lasers. Methylcellulose not required.

Product Code	Image Mag.	Laser Spot Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3MHD-10*	.65x	1.54x	10mm	25.0mm	150°
OG3MHD-15*	.65x	1.54x	15mm	26.5mm	150°
(OG3MHD-10 Lens w/OACF-15 flange)					
OG3MHD-17	.65x	1.54x	17mm	27.5mm	150°
(OG3MHD-10 Lens w/OACF-17 flange; methylcellulose recommended)					

Flanges also sold separately, see accessory section.
U.S. Patent #6,767,098

OCULAR AUTOCLAVABLE THREE MIRROR



Provides mirrors for the examination of the fundus and the anterior chamber angle. Steam sterilizable universal ophthalmic lens prism. High index glass design. Mirrors maintain total internal reflection as if they are coated. One 64° gonio mirror and two fundus mirrors, 73° and 67°. Fundus images overlap, no "blind spot" in fundus field. Methylcellulose not required. Cleaning Method 3. Gonio mag .61x.

Product Code	Image Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OG3MAC-10*	.60x	10mm	25mm	150°
OG3MAC-15*	.60x	15mm	26.5mm	150°
(OG3MAC-10 Lens w/OACF-15 flange)				
OG3MAC-17	.60x	17mm	27.5mm	150°
(OG3MAC-10 Lens w/OACF-17 flange; methylcellulose recommended)				

Flanges also sold separately, see accessory section.
U.S. Patent #6,767,098

OCULAR FUNDUS DIAGNOSTIC

The flat front surface of this "Goldmann" type fundus lens provides a direct image of the posterior pole. Methylcellulose and NMR-K (Kapetansky) no methylcellulose designs available. Also available with our high performance, anti-reflective coating. See page 9 for more details.

Product Code	Image Mag.	Contact Diam.	Lens Height	Static FOV
OGF	.93x	15.5mm	16.5mm	36°
OGF-2*	.97x	15.5mm	16.5mm	35°

OCULAR MAGNA VIEW GONIO

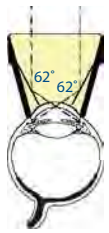
The Ocular Magna View Gonio Lens is an outstanding choice for gonioscopy and digital photography of the anterior chamber angle. Four different lens styles are available to suit your needs including the Single Mirror, Two Mirror, higher magnification 1.5X, and the new Goniometric. All four styles are also available with the Ocular Securefit® flange. See page 12 for more details.

OCULAR SINGLE MIRROR GONIO

Small size gonio lens with one 62° mirror. Compact knurled ring simplifies 360° viewing of the anterior chamber angle. Methylcellulose and NMR-K (Kapetansky) no methylcellulose designs available. Available with the Ocular Securefit® flange. Also available with our high performance, anti-reflective coating. See page 13 for more details.

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Static Gonio FOV
OSMG	.80x	15mm	19.5mm	170°
OSMG-2*	.80x	15mm	19.5mm	170°
OSMGF (w/flange)	.80x	17mm	20.5mm	170°

OCULAR TWO MIRROR GONIO



Two opposing 62° mirrors provide a complete view of the anterior chamber angle with only a 180° lens rotation. Methylcellulose and NMR-K (Kapetansky) no methylcellulose designs available. Available with the Ocular Securefit® flange. Also available with our high performance, anti-reflective coating. See page 13 for more details.

Product Code	Gonio Mag.	Contact Diam.	Lens Height	Static Gonio FOV
O2M	.80x	15mm	19.5mm	170°
O2M-2*	.80x	15mm	19.5mm	170°
O2MF (w/flange)	.80x	17mm	20.5mm	170°

OCULAR KOEPPE DIAGNOSTIC

Direct gonioscopy lens with magnification. The lens rests on the scleral flange creating a corneal vault and leaving the anterior chamber angle undisturbed. Three sizes available.

Product Code	Style	Image Mag.	Contact Diam.	Static Gonio FOV
OKL	Large	1.50x	19mm	160°
OKM	Medium	1.53x	18mm	160°
OKS	Small	1.57x	17mm	160°

DIAGNOSTIC LENSES USE CLEANING METHOD 1 UNLESS OTHERWISE NOTED

* No methylcellulose required

NEW Laserlight® HD coating now on our MaxField® Indirect product line. Brighter images. Less reflection. Great for digital imaging! See coatings and materials (page 66) for more details.

Add some extra style to your everyday tools. All of our Maxlight® and MaxField® Indirect Lenses are now available with red, blue, green, gold, purple, or traditional black holding rings, with the exception of the Ocular Ultra View Small Pupil (OI-SP) and Ocular MaxField® 20D Small (OI-20MS).

INDIRECT DIAGNOSTIC/LASER LENS COMPARISON CHART

PRODUCT CODE & DESCRIPTION	USAGE	IMAGE MAG (approx)	LASER SPOT MAG FACTOR	STATIC FOV	DYNAMIC FOV (mm)	WORKING DISTANCE (mm)	CLEAR APERTURE (mm)	LENS WEIGHT (grams)	ASPHERE MATERIAL
OI-14 MaxLight® 14D	BIO	4.29x	.23x	37°	NA	72.0	52.0	34	CR-39
OI-14M HD MaxField® 14D	BIO	4.17x	.24x	38°	NA	72.0	52.0	57	GLASS
OI-18 MaxLight® 18D	BIO	3.40x	.29x	44°	NA	55.0	48.0	39	CR-39
OI-18M HD MaxField® 18D	BIO	3.40x	.29x	44°	NA	55.0	48.0	58	GLASS
OI-20 MaxLight® 20D	BIO	2.97x	.34x	50°	NA	47.0	48.0	39	CR-39
OI-20A MaxAC® Autoclavable 20D	BIO/O.R.	3.03x	.33x	50°	NA	47.0	48.0	51	GLASS
OI-20M HD MaxField® 20D	BIO	2.97x	.34x	50°	NA	47.0	48.0	56	GLASS
OI-20MS HD MaxField® 20D Small	BIO	2.97x	.34x	40°	NA	47.0	38.0	39	GLASS
OI-222 MaxLight® Triple Two 22D	BIO	2.72x	.37x	60°	NA	39.0	52.0	48	CR-39
OI-22M HD MaxField® 22D	BIO	2.73x	.37x	60°	NA	39.0	52.0	73	GLASS
OI-25M HD MaxField® 25D	BIO	2.40x	.42x	63°	NA	33.0	48.0	59	GLASS
OI-28 MaxLight® 28D	BIO	2.13x	.47x	58°	NA	29.0	38.0	22	CR-39
OI-28A MaxAC® Autoclavable 28D	BIO/O.R.	2.15x	.47x	59°	NA	28.0	38.0	36	GLASS
OI-28M HD MaxField® 28D	BIO	2.11x	.47x	58°	NA	27.0	38.0	39	GLASS
OI-30M HD MaxField® 30D	BIO	1.97x	.51x	63°	NA	26.0	38.0	38	GLASS
OI-35M HD MaxField® 35D	BIO	1.71x	.58x	74°	NA	17.0	34.0	32	GLASS
OI-40M HD MaxField® 40D	BIO	1.49x	.67x	82°	NA	14.0	34.0	32	GLASS
OI-54M HD MaxField® 54D	SLIT LAMP	1.10x	.90x	86°	137°	10.0	29.0	25	GLASS
OI-UM MaxLight® Ultra Mag 60	SLIT LAMP	1.15x	.87x	76°	131°	11.0	30.0	17	CR-39
OI-60M HD MaxField® 60D	SLIT LAMP	1.00x	1.00x	85°	154°	10.0	29.0	32	GLASS
OI-66M HD MaxField® 66D	SLIT LAMP	.91x	1.10x	91°	144°	8.0	27.0	25	GLASS
OI-72M HD MaxField® 72D	SLIT LAMP	.83x	1.20x	102°	155°	7.0	27.0	21	GLASS
OI-HM MaxLight® High Mag 78D	SLIT LAMP	.93x	1.07x	84°	139°	8.0	29.0	17	CR-39
OI-HM-78M HD MaxField® High Mag 78D	SLIT LAMP	.98x	1.02x	88°	154°	10.0	29.0	32	GLASS
OI-78M Osher MaxField® 78D HD	SLIT LAMP & SURGICAL SCOPE	.77x	1.30x	98°	155°	7.0	27.0	21	GLASS
OI-84M HD MaxField® 84D	SLIT LAMP	.71x	1.40x	105°	158°	5.0	27.0	28	GLASS
OI-STD MaxLight® Standard 90	SLIT LAMP	.75x	1.34x	94°	153°	5.0	19.0	6	CR-39
OI-STDM HD MaxField® Standard 90	SLIT LAMP	.75x	1.34x	94°	153°	5.0	19.0	9	GLASS
OI-STD-LR MaxLight® Std 90 w/Lg Ring	SLIT LAMP	.75x	1.34x	94°	153°	5.0	19.0	15	CR-39
OI-STDM-LR HD MaxField® Std 90 w/Lg Ring	SLIT LAMP	.75x	1.34x	94°	153°	5.0	19.0	18	GLASS
OI-100M HD MaxField® 100D	SLIT LAMP	.60x	1.67x	110°	146°	4.0	21.0	18	GLASS
OI-120M HD MaxField® 120D	SLIT LAMP	.50x	2.00x	120°	173°	4.0	21.0	19	GLASS
OI-SP HD Ultra View SP 132D	SLIT LAMP	.45x	2.22x	99°	158°	4.0	16.0	9	GLASS

COATING: Laserlight® and Laserlight® HD anti-reflective coating, for maximum brightness and easy cleaning, see page 66

BINOCULAR INDIRECT OPHTHALMOSCOPY (BIO) LENSES

MAXLIGHT® CR-39 ASPHERIC LENSES

OCULAR MAXLIGHT® 14 DIOPTER

High magnification for detailed examination of macula and optic disc. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-14	4.29x	.23x	37°	72mm	52mm	34g

OCULAR MAXLIGHT® 18 DIOPTER

High resolution image with 15% more magnification than a 20D for greater detail. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-18	3.40x	.29x	44°	55mm	48mm	39g

OCULAR MAXLIGHT® 20 DIOPTER

Most common lens for B.I.O. High resolution image. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-20	2.97x	.34x	50°	47mm	48mm	39g

OCULAR MAXLIGHT® TRIPLE TWO PANFUNDUS

Bigger aperture and field of view than a 20D. 22D lens for general fundus exam with the binocular indirect ophthalmoscope. Large diameter and unique optical design combine magnification with very wide field of view. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-222	2.72x	.37x	60°	39mm	52mm	48g

Ocular Indirect Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR MAXLIGHT® 28 DIOPTER

Excellent lens for use during pediatric examinations. Excellent general purpose lens. Small diameter, easy to handle. Popular for examining children. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-28	2.13x	.47x	58°	29mm	38mm	22g

MAXFIELD® GLASS ASPHERIC LENSES

NEW Laserlight® HD anti-reflective coating now available on our MaxField® Indirect product line. Brighter images. Less reflection.

OCULAR MAXFIELD® 14D

High magnification for high detail. Features a computer optimized aspheric design for maximum resolution and field of view. Made of high transmittance glass for bright, clear images. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-14M	4.17x	.24x	38°	72mm	52mm	57g

OCULAR MAXFIELD® 18D

High resolution image with 15% more magnification than a 20D for greater detail. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-18M	3.40x	.29x	44°	55mm	48mm	58g

OCULAR MAXFIELD® 20D

Most common lens for B.I.O. High resolution image. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-20M	2.97x	.34x	50°	47mm	48mm	56g

INDIRECT LENSES USE CLEANING METHOD 2

NEW OCULAR MAXFIELD® 20D SMALL LENS

High resolution 20 diopter lens offered at the same comfortable diameter as our traditional 28D lens. More ergonomic than the traditional 20D* for smaller patients, the new OI-20MS glass aspheric lens features our NEW Laserlight® HD anti-reflective coating and is ideal for digital imaging and laser transmission. See Coatings and Materials (page 66) for more details.

* Ocular Instruments 0I-20M clear aperature = 48mm

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-20MS	2.97x	.34x	40°	47mm	38mm	39g

OCULAR MAXFIELD® 22D

Bigger aperture and field of view than a 20D. Features a computer optimized aspheric design for maximum resolution and field of view. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-22M	2.73x	.37x	60°	39mm	52mm	73g

OCULAR MAXFIELD® 25D

Ideal for examination of ROP patients. Excellent lens for use during pediatric examinations. More field of view than a 20D. Features a computer optimized aspheric design for maximum resolution and field of view. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-25M	2.40x	.42x	63°	33mm	48mm	59g

OCULAR MAXFIELD® 28D

Excellent lens for use during pediatric examinations. Excellent general purpose lens. Small diameter easy to handle. Popular for examining children. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-28M	2.11x	.47x	58°	27mm	38mm	39g

Ocular Indirect Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR MAXFIELD® 30D

10% more field than a 28D. Features a computer optimized aspheric design for maximum resolution and field of view. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-30M	1.97x	.51x	63°	26mm	38mm	38g

OCULAR MAXFIELD® 35D

Works well through small pupils. Features a computer optimized aspheric design for maximum resolution and field of view. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-35M	1.71x	.58x	74°	17mm	34mm	32g

OCULAR MAXFIELD® 40D

Quick scanning lens that works well through small pupils. For use during pediatric examinations. Features a computer optimized aspheric design for maximum resolution and field of view. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-40M	1.49x	.67x	82°	14mm	34mm	32g

OCULAR LANDERS ROP LENS ATTACHMENT

Engraved bezel and crosshairs allow clock hour estimation in neo-vascularization when viewing ROP. Estimate the size of inflammatory/non-inflammatory retinal lesions. Grid spacing aids in estimating the size of ocular tumors. Bezel is conveniently marked at hour and half hour locations. Designed to fit anterior side of Ocular 28D Indirect Lenses*. The Ocular 28D Indirect Lenses are sold separately.

Product Code
OI-LROP

*Lens design with diamond knurl pattern only

INDIRECT LENSES USE CLEANING METHOD 2

OCULAR SAXENA RETINAL GRID 428

Monofilament line at 4.0mm spacing provides reference to the size of the optic disc. Estimate the size of inflammatory/non-inflammatory retinal lesions. Grid spacing aids in estimating the size of ocular tumors. Easily estimates the amount of disk edema. Ideal for ROP. Designed to fit anterior side of Ocular 28D Indirect Lenses.* The Ocular 28D Indirect Lenses are sold separately.

Product Code
OI-SRG428

*Lens design with diamond knurl pattern only

OCULAR SAXENA RETINAL GRID 520

Monofilament line at 5.20mm spacing provides reference to the size of the optic disc. Estimate the size of inflammatory/non-inflammatory retinal lesions. Grid spacing aids in estimating the size of ocular tumors. Easily estimate the amount of disk edema. Easily fits onto anterior side of Ocular 20D Indirect lenses*. The Ocular 20D Indirect Lenses are sold separately.

Product Code
OI-SRG520

* Lens design with diamond knurl pattern only

MAXAC® INDIRECT LENSES

OCULAR MAXAC® 20 DIOPTER

Provides ultra high resolution retinal image with the B.I.O. during clinical practice or in the operating room. Features computer optimized aspheric design for maximum resolution and field of view. STEAM AUTOCLAVABLE.
Lens not sold in autoclavable case. To order an autoclavable case order the OI-ST.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-20A	3.03x	.33x	50°	47mm	48mm	51g

OCULAR MAXAC® 28 DIOPTER

Provides ultra high resolution retinal image with the B.I.O. during clinical practice or in the operating room. Features computer optimized aspheric design for maximum resolution and field of view. Small diameter, easy to handle. STEAM AUTOCLAVABLE. Lens not sold in autoclavable case. To order an autoclavable case order the OI-ST.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Working Distance	Clear Aperture	Lens Weight
OI-28A	2.15x	.47x	59°	28mm	38mm	36g

Ocular Indirect Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

MaxAC® autoclavable lenses are uncoated for sterilization compatability.

OCULAR MAXAC® (AUTOCLAVABLE) LENS STAND

The lens stand minimizes water spots from the autoclave. Use during sterilization to hold the lens on edge.

Product Code
OI-LSA

SLIT LAMP INDIRECT OPHTHALMOSCOPY LENSES

MAXLIGHT® CR-39 ASPHERIC LENSES

OCULAR MAXLIGHT® ULTRA MAG 60

Designed for detailed examination of the macula and optic disc. Precision computer aided design and manufacturing yield high resolution. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-UM	1.15x	.87x	76°	131°	11mm	30mm	17g

OCULAR MAXLIGHT® HIGH MAG 78

Unique combination of magnification and field. High resolution to examine fine detail. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-HM	.93x	1.07x	84°	139°	8mm	29mm	17g

INDIRECT LENSES USE CLEANING METHOD 2
MaxAC® AUTOCLAVABLE LENSES USE METHOD 3

OCULAR MAXLIGHT® STANDARD 90

The most popular power for non-contact fundus examination. Large and small holding ring available. Available with red, blue, green, gold, purple, or traditional black holding ring.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-STD	.75x	1.34x	94°	153°	5mm	19mm	6g
OI-STD-LR	.75x	1.34x	94°	153°	5mm	19mm	15g

MAXFIELD® GLASS ASPHERIC LENSES

NEW Laserlight® HD anti-reflective coating now available on our MaxField® Indirect product line. Brighter images. Less reflection.

OCULAR MAXFIELD® 54D

High magnification and resolution for examining macula and disc. Excellent for high resolution digital imaging. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-54M	1.10x	.90x	86°	137°	10mm	29mm	25g

OCULAR MAXFIELD® 60D

High resolution lens produces one to one image of fundus. Excellent for high resolution digital imaging. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-60M	1.00x	1.00x	85°	154°	10mm	29mm	32g

Ocular Indirect Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR MAXFIELD® 66D

Static field of view to the arcades. Larger stereoscopic field than 60D. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-66M	.91x	1.10x	91°	144°	8mm	27mm	25g

OCULAR MAXFIELD® 72D

Performance like a 78D with a little more magnification. Unique design minimizes reflections. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-72M	.83x	1.20x	102°	155°	7mm	27mm	21g

OCULAR MAXFIELD® HIGH MAG 78D

Traditional 78D. Made of high transmittance glass and featuring a wavefront optimized double aspheric design that yields an extremely wide field and sharp image. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-HM-78M	.98x	1.02x	88°	154°	10mm	29mm	32g

INDIRECT LENSES USE CLEANING METHOD 2

OCULAR OSHER MAXFIELD® 78D

Formerly called the Osher Panfundus Lens. 78D high refractive index glass lens gives wider field than a traditional 78. Very high resolution and wide field for slit lamp fundus examination. Unique design minimizes reflections. Works very well with surgical microscope. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-78M	.77x	1.30x	98°	155°	7mm	27mm	21g

OCULAR MAXFIELD® 84D

Very high precision image. We call it the Wide Field 90D because it has more static field of view. Excellent for high resolution digital imaging. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-84M	.71x	1.40x	105°	158°	5mm	27mm	28g

OCULAR MAXFIELD® STANDARD 90

The most popular power for non-contact fundus examination. Large and small holding ring available. Also available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-STDM	.75x	1.34x	94°	153°	5mm	19mm	9g
OI-STDM-LR	.75x	1.34x	94°	153°	5mm	19mm	18g

Ocular Indirect Lenses come with Laserlight® coating for maximum brightness and easy cleaning, see page 66.

OCULAR MAXFIELD® 100D

General screening lens. Works well through small pupils. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-100M	.60x	1.67x	110°	146°	4mm	21mm	18g

OCULAR MAXFIELD® 120D

High refractive index glass and precision aspheric design yield an extremely wide field and sharp image. Excellent through small pupils, 80° field of view through a 2mm pupil. Available with red, blue, green, gold, purple, or traditional black holding ring. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-120M	.50x	2.00x	120°	173°	4mm	21mm	19g

OCULAR ULTRA VIEW SMALL PUPIL

132D lens permits detailed retinal inspection well outside the arcades. Primarily designed to examine patients with small pupils. Retains an 85° field of view through a 2mm pupil. Now with our NEW Laserlight® HD anti-reflective coating. See Coatings and Materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-SP	.45x	2.22x	99°	158°	4mm	16mm	9g

INDIRECT LENSES USE CLEANING METHOD 2

OCULAR INVERTER VITRECTOMY SYSTEM

Designed to work with Zeiss, Zeiss type (Topcon, Moeller, etc.) and Leica (Wild) microscopes. Easy to operate with steam sterilizable knob. Short profile for use with all fixed and inclinable eyepieces. No light loss in upright mode. Virtually no image shift when switching between upright and inverting modes. Crystal clear optics. Compatible with all wide angle inverting vitrectomy lenses. Available with Ocular Wide Angle Vitrectomy Lenses. (See sets on Page 42)

Product Code	
OIVS2L	IVS for Leica (Wild) Microscopes
OIVS2Z	IVS for Zeiss and Zeiss Type Microscopes

INCLUDES:

Product Code	
OIVS2-K	Rubber Adjustment Knob (steam sterilizable)
OIVS-SD	Screw Driver, slotted, 3/16"
OIVS-C	Carrying Case (shown in Cases, p. 60)

OCULAR VITRECTOMY LENS HANDLE

Designed to be used with the Wide Field and Equatorial lenses, the handle provides additional stability to the lens while sitting in the ring during a procedure.

Product Code
OLIV-H

OCULAR LANDERS WIDE FIELD VITRECTOMY LENS

155D lens produces wide angle inverted image. Allows panoramic viewing of far peripheral retina. Clear image in fluid or gas filled eye. Works well with hazy ocular media or through a small pupil. Steam sterilizable, can be quickly prepared for a demanding surgical schedule. Stable in tall sutured lens ring.

Product Code	Image Mag.	Lens Height	Static FOV	Dynamic FOV
OLIV-WF	.38x	12mm	130°	146°

OCULAR LANDERS EQUATORIAL II VITRECTOMY LENS

91D wide angle lens. For procedures from the posterior pole to the equator. Provides greater magnification and detail than Landers Wide Field. Steam sterilizable for rapid re-use.

Product Code	Image Mag.	Lens Height	Static FOV	Dynamic FOV
OLIV-EQ-2	.65x	14.5mm	101°	131°

OCULAR WOLDOFF HIGH MAGNIFICATION VITRECTOMY LENS

66D lens, ideal for wide angle viewing of the posterior pole. Its wide field provides stereopsis well beyond the area seen by a conventional flat lens. The high magnification and resolution create very precise depth perception. It provides an excellent image for delicate work around the macula such as macular hole surgery or peeling of epiretinal membranes from the macula. Lens of choice for videotaping macular procedures. Steam sterilizable for rapid re-use.

Product Code	Image Mag.	Lens Height	Static FOV	Dynamic FOV
OWIV-HM	.90x	13.5mm	57°	100°

LENSES ON THIS PAGE USE CLEANING METHOD 3
ASK ABOUT OUR DISCOUNTS ON MULTIPLE LENS SETS!

OCULAR LANDERS NON-AUTOCLAVABLE WIDE FIELD VITRECTOMY LENS

Single-piece, 155D lens designed for clinical situations where autoclaving is either not available or not desired. Excellent for panoramic viewing of the far peripheral retina and laser photocoagulation when managing a peripheral retinal tear or giant retinal tear. Its wide field of view and low magnification make it particularly useful during fluid-gas exchanges. Excellent lens for use with media opacities such as cataracts and cloudy corneas, and works well through a small pupil. It is the lens of choice for videotaping important procedures.

Product Code	Image Mag.	Lens Height	Static FOV	Dynamic FOV
OLIV-WFNA	.38x	12mm	130°	146°

OCULAR LANDERS NON-AUTOCLAVABLE EQUATORIAL VITRECTOMY LENS

Single-piece 91D lens designed for clinical situations where autoclaving is either not available or not desired. It is excellent for delicate membrane peeling around the optic nerve and off of the major vascular arcades. It also provides an excellent image for delicate work around the macula, such as macular hole surgery or peeling of epiretinal membranes from the macula.

Product Code	Image Mag.	Lens Height	Static FOV	Dynamic FOV
OLIV-EQNA	.65x	14.5mm	101°	131°

OCULAR WOLDOFF NON-AUTOCLAVABLE HIGH MAGNIFICATION VITRECTOMY LENS

Single-piece, 66D lens designed for clinical situations where autoclaving is either not available or not desired. It is ideal for wide angle viewing of the posterior pole. Its wide field provides stereopsis well beyond the area seen by a conventional flat lens. The high magnification and resolution create very precise depth perception. It provides an excellent image for delicate work around the macula such as macular hole surgery or peeling of epiretinal membranes from the macula. It also is the lens of choice for videotaping macular procedures.

Product Code	Image Mag.	Lens Height	Static FOV	Dynamic FOV
OWIV-HMNA	.90x	13.5mm	57°	100°

LENSES ON THIS PAGE USE CLEANING METHOD 1

Ocular wide angle vitrectomy lenses are compatible with all detachable inverting systems

Buy in sets
AND SAVE!

IN ADDITION, IVS SETS INCLUDE:

PRODUCT CODE	WF	EQ II	HM	WFNA	EQNA	HMNA	Handle	Ring*
OIVS2L-WE	1	1					2	1
OIVS2L-EH		1	1				1	1
OIVS2L-WH	1		1				1	1
OIVS2L-WEH	1	1	1				2	1
OIVS2L-WENA				1	1		2	1
OIVS2L-EHNA					1	1	1	1
OIVS2L-WHNA				1		1	1	1
OIVS2L-WEHNA				1	1	1	2	1
OIVS2Z-WE	1	1					2	1
OIVS2Z-EH		1	1				1	1
OIVS2Z-WH	1		1				1	1
OIVS2Z-WEH	1	1	1				2	1
OIVS2Z-WENA				1	1		2	1
OIVS2Z-EHNA					1	1	1	1
OIVS2Z-WHNA				1		1	1	1
OIVS2Z-WEHNA				1	1	1	2	1

*OLV-1-4P See page 47

All products in this section are also available separately.

OCULAR LANDERS WIDE ANGLE SURGICAL VIEWING SYSTEM

Product Code
OSVS

Non-contact vitrectomy system designed with a flexible arm for positioning wide angle lenses which easily swings in and out of the surgical field. The OSVS [clamps] attaches to the wrist rest or surgical bed, freeing the surgeon's hands and the assistant to perform tasks other than holding a lens. When used with the Upright Vitrectomy Lens, the system allows the surgeon to work in the vitreous with an upright, non-reversed image under panoramic conditions. Can also hold an indirect lens for use with separate inverter. During surgery, operative work is performed both outside and inside the globe. Using lenses with the OSVS enables the surgeon to move back and forth smoothly and quickly. More affordable than similar systems.

INCLUDES:

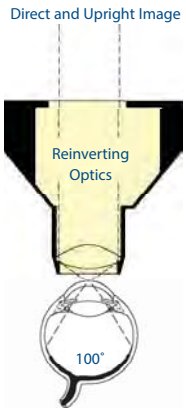
Qty	Product Code	
1	OSVS-A	Arm, Slotted
1	OSVS-AC	Arm Clamp
1	OSVS-FC	Frame Clamp
2	OSVS-LFM	Link, Female/Male (extras)
2	OSVS-P	Post - 2 qty
1	OSVS-SC	Support Collar
1	OSVS-C	Carrying Case
1	OSVS-W	Wrench
2	OSVS-TS	Knobs (2 extra)

IN ADDITION, SVS SETS INCLUDE:

PRODUCT CODE	OUV 132-2	OIV 132	Lens Holder	Lens Case
OSVS-U132-2	1		1	1
OSVS-I132		1	1	1

All products in this section are also available separately.

OCULAR PEYMAN-WESSELS-LANDERS 132D UPRIGHT VITRECTOMY LENS



Upright Wide Field Image without the need for a microscope mounted inverter. The 132D imaging optic gives a very wide, non-contact view of the fundus and vitreous. Unlike conventional wide angle lenses, the image of this lens is upright to simplify vitreo-retinal surgery. 4mm working distance for maximum field. 7mm working distance allows view of far periphery without repositioning the lens. This lens was designed to be used with the Ocular Landers Wide Angle Surgical Viewing System (OSVS). It attaches to the OSVS using the Ocular 132D Upright Vitrectomy Lens Holder (OUV-H132-2). Designed to allow a clear view in the fluid or air filled eye. Sterilizable case included.

Product Code	Image Mag.	Static FOV	Dynamic FOV
OUV-132-2	.45x	100°	135°

Journal reference: American Journal of Ophthalmology, Vol. 136, No. 1, pp 199-201, July 2003.

OCULAR 132D UPRIGHT VITRECTOMY LENS HOLDER

Ring holder for the Peyman-Wessels-Landers 132D Upright Vitrectomy Lens. Includes two adjustable links that snap onto the end of the slotted arm of the Surgical Viewing System.

Product Code
OUV-H132-2

OCULAR 132D INDIRECT VITRECTOMY LENS

Designed to be used on the OSVS in conjunction with an Inverter Vitrectomy System. Sterilizable case included. Non-contact design allows the patient's eye to be rotated freely to view the peripheral retina and vitreous.

Product Code	Image Mag.	Static FOV	Dynamic FOV
OIV-132	.45x	99°	135°

OCULAR 132D INDIRECT VITRECTOMY LENS HOLDER

Clip style holder for the Indirect 132D Upright Vitrectomy Lens. Includes two adjustable links that snap onto the end of the slotted arm of the Surgical Viewing System.

Product Code
OIV-H132

OUV-132-2 USES CLEANING METHOD 1;
ALL OTHER PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

LANDERS HIGH REFRACTIVE INDEX (HRI) VITRECTOMY LENS SET

Made from high refractive index glass, the HRI lenses offer a wider field of view, with less distortion and reflections. Each possesses new curves and angles, resulting in sharper, clearer peripheral and posterior retinal and vitreous images when compared with earlier lenses. This means fewer lens changes during the surgical procedure. The Landers Tall Notched Lens Ring (no struts) makes scleral depression easier when operating in the region of the vitreous base. The Landers Occluder fits precisely in the lens ring and protects the macula from inadvertent light/photo damage. Set also includes five vitrectomy lenses, lens forceps, and an autoclavable case.

HRI VITRECTOMY LENS SPECIFICATIONS

PRODUCT CODE	Image Mag	Static FOV
OLV-2-HRI	0.78x	28°
OLV-3-HRI	1.49x	34°
OLV-4-HRI	0.58x	48°
OLV-6-HRI	0.58x	44°
OLV-7-HRI	0.58x	38°

DOT ON ANTERIOR SURFACE IDENTIFIES HRI LENS

QUARTZ VITRECTOMY LENS SPECIFICATIONS

PRODUCT CODE	Image Mag	Static FOV
OLV-2	0.80x	25°
OLV-3	1.49x	30°
OLV-4	0.49x	48°
OLV-5	1.02x	36°
OLV-5SR	1.02x	36°
OLV-6	1.02x	36°
OLV-7	1.02x	33°
OLV-8	1.02x	22°
OLV-9	0.40x	18°

OLVS-HRI
Landers HRI Vitrectomy Lens Set includes:

1. OLV-2-HRI Biconcave 90D Lens
   90D biconcave lens facilitates viewing the fundus in an air-filled vitreous cavity in phakic and pseudophakic eyes.

OLV-2-HRI

2. OLV-3-HRI Magnifying Lens
   For detailed examination and minute surgical manipulation of retinal membranes in phakic and pseudophakic eyes.

OLV-3-HRI

3. OLV-4-HRI Wide Field Lens
   Plano anterior surface facilitates a 48° field of view when visualizing the central posterior pole and central vitreous in phakic and pseudophakic eyes.

OLV-4-HRI

4. OLV-6-HRI 20° Prism Lens
   Provides visualization of the posterior peripheral fundus and posterior peripheral vitreous in phakic, aphakic and pseudophakic eyes.

5. OLV-7-HRI 30° Prism Lens
   Provides visualization of the peripheral fundus and peripheral vitreous beyond the equator with minimal distortion in phakic, aphakic and pseudophakic eyes.

OLV-6-HRI

6. OLV-1-TN Landers Tall Notched Vitrectomy Lens Ring
   This stainless steel ring is centered on the cornea. Three notches are designed in the top of the ring for suture placement on the sclera.

7. OLV-OC Landers Occluder
   When placed in stainless steel ring, occluder blocks microscope light from entering patient's eye during external procedures such as suturing.

OLV-7-HRI

8. OLV-FCP Landers Lens Forceps
   Surgical forceps simplify placement and removal of vitrectomy lenses used with suture down rings.

TRY SILICONE RINGS - HIGH STABILITY WITHOUT SUTURES

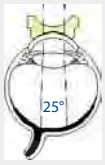
PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

OCULAR LANDERS VITRECTOMY LENS RING SYSTEM

The Landers Vitrectomy Lens Ring System is available with your choice of the Landers Vitrectomy Lens Ring with two struts, or the Landers Tall Notched Vitrectomy Lens Ring (no struts), and includes the Landers Occluder, seven vitrectomy lenses, lens forceps and an autoclavable case.

OLVS-3 AND OLVS-3N

Ocular Landers Vitrectomy Lens Ring System includes:



OLV-2

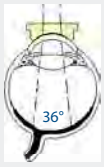
OLV-6

OLV-3

OLV-7

OLV-4

OLV-9



OLV-5

PRODUCTS SOLD IN SETS ARE ALSO AVAILABLE SEPARATELY.

1. OLV-2 Landers Biconcave
   83D biconcave lens facilitates viewing the fundus in an air-filled vitreous cavity in phakic and pseudophakic eyes.

2. OLV-3 Machemer Magnifying
   For detailed examination and minute surgical manipulation of retinal membranes in phakic and pseudophakic eyes.

3. OLV-4 Peyman Wide Field
   Concave anterior surface facilitates a 48° field of view when visualizing the central posterior pole and vitreous in phakic and pseudophakic eyes.

4. OLV-5 Machemer Flat
   The plano anterior surface affords a 36° field of view of the central posterior pole and vitreous in phakic and pseudophakic eyes. This lens is ideal for photography.

5. OLV-6 Tolentino 20° Prism
   Provides visualization of the posterior peripheral fundus and vitreous in phakic, aphakic and pseudophakic eyes.

6. OLV-7 Tolentino 30° Prism
   Provides visualization of the peripheral fundus and vitreous beyond the equator with minimal distortion in phakic, aphakic and pseudophakic eyes.

7. OLV-9 Woldoff Prismatic Biconcave
   Designed to allow a clear view of the retinal periphery in the gas or air-filled phakic or pseudophakic eye. Very useful for laser endophotocoagulation in the periphery, or for visualizing the cannulated extrusion needle through a peripheral retinal break in the gas-filled phakic or pseudophakic eye.

8. OLV-1 Landers Vitrectomy Lens Ring
   (included in set OLVS-3) Stainless steel ring with two suture down struts.

9. OLV-1-TN Landers Tall Notched Vitrectomy Lens Ring
   (included in set OLVS-3N) This stainless steel ring is centered on the cornea. Three notches are designed in the top of the ring for suture placement on the sclera.

10. OLV-OC Landers Occluder
    When placed in stainless steel ring, occluder blocks microscope light from entering patient's eye during external procedures such as suturing.

11. OLV-FCP Landers Lens Forceps
    Surgical forceps simplify placement and removal of vitrectomy lenses used with suture down rings.

PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

ALSO AVAILABLE:

OLV-5SR OCULAR MACHEMER PLUS

Our Machemer Flat Lens (OLV-5) is provided with a silicone flange.
This combination is for observation or surgery of the central retina and vitreous when the use of a suture down ring is not desired.

OLV-8 OCULAR LANDERS 50° PRISM

Allows visualization for vitrectomy and endophotocoagulation procedures in the far peripheral retina in phakic and pseudophakic eyes.

OCULAR DISPOSABLE VITRECTOMY LENSES

High resolution PMMA optics with
a silicone flange for stability. Ocular Disposable Vitrectomy Lenses are designed to be used once, then discarded. Packaged individually in a sterile peel pack, and sold in a box of 10. The silicone flange replaces the need for a suture-down ring.

ODVB – BICONCAVE

83D biconcave lens facilitates viewing the fundus in an air-filled vitreous cavity in phakic and pseudophakic eyes.

ODVF – FLAT

The plano anterior surface affords a 36° field of view of the central posterior pole and vitreous in phakic and pseudophakic eyes. This lens is ideal for photography.

ODVM – MAGNIFYING

For detailed examination and minute surgical manipulation of retinal membranes in phakic and pseudophakic eyes.

ODVW – WIDE FIELD

Concave anterior surface facilitates a 48° field of view when visualizing the central posterior pole and vitreous in phakic and pseudophakic eyes.

ODV3P – 30° PRISM

Provides visualization of the posterior peripheral fundus and vitreous beyond the equator with minimal distortion in phakic, aphakic and pseudophakic eyes.

OCULAR VITRECTOMY LENS RINGS

OFV-4 FOXMAN VITRECTOMY

Designed to be stable on the eye by straddling the inserted trocar thus not requiring sutures. Struts are spaced for a 2.4mm wide trocar and have markings at 3mm and 4mm from the limbus.

OLV-1S LANDERS SILICONE

This flexible lens flange provides uncompromised lens stability during vitrectomy surgery. The silicone ring can be used with all Ocular wide field and Landers System vitrectomy lenses. The narrow flange allows full access to the surgical sites and is ideal for 25 gauge surgery. Four per package.

OLV-1-4P LANDERS FOUR POST

Two sutures placed over one post on each side hold this ring on the eye. Either post can be selected to center the ring over the patient's pupil.

OLV-1-IN LANDERS IRRIGATING NOTCHED

Irrigation version of notched ring. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

OLV-1-IR LANDERS IRRIGATING

This ring features an irrigation port. Sutures secure the two struts to the sclera which allows blood to be irrigated away and keeps the cornea moist. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

OTN-R TANO VITRECTOMY LENS RING

This ring, with four upright tabs for suturing, requires only one circumferential suture. Fast, easy positioning, adjustment and removal without cutting or removing the suture.

Journal Reference: Ophthalmic Surgery & Lasers, Vol. 27, No. 10, p. 891, October 1996

OCULAR REICHEL VISCOUS CONTACT SYSTEM

Integrates lens handle and delivery of viscoelastic or other solutions into one system. Designed for use with 5ml syringe*, which is not included. Can be bent as desired to suit individual preference. Designed to be used with all Ocular Instruments Wide Field and Equatorial vitrectomy lenses.

Product Code

ORVCS

*Can be used with BD 5ml syringe #309603 and BD Angiocath IV catheter #318123 (Remove needle prior to use). Recommended length of flexible catheter is 3-4mm, check for clearance between tip and patients eye prior to use.

Journal reference: Ophthalmic Surgery Lasers & Imaging, Vol. 40, No. 6, pp. 611-612, November / December 2009.

OCULAR REICHEL VITRECTOMY LENS HOLDER

The Reichel Vitrectomy Lens Holder allows the use of vitrectomy lenses with the Ocular Reichel Viscous Contact System (ORVCS, see page 39). Vitrectomy lenses are conveniently transformed into a handheld lens by using the Vitrectomy Lens Holder. Designed for use with the following lenses: OLV-2-HRI, OLV-3-HRI, OLV-4-HRI, OLV-3, OLV-4, OLV-5, ODVF, and ODVW. The ORVCS is sold separately.

Product Code

ORVLH

Journal reference: Ophthalmic Surgery Lasers & Imaging, Vol. 40, No. 6, pp. 611-612, November / December 2009.

PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

PEDIATRIC VITRECTOMY LENS SPECIFICATIONS		
PRODUCT CODE	Image Mag	Static FOV
OPV-B	1.03x	25°
OPV-F	1.02x	36°
OPV-P	1.02x	33°

OCULAR PEDIATRIC VITRECTOMY LENS SET

The Pediatric Vitrectomy Lens Set is for early Retinopathy of Prematurity and congenital developmental anomalies such as Primary Persistent Hyperplastic Vitreous. These 8mm diameter lenses provide a clear view of the entire retina and optic nerve while preventing accidental lens/cornea separation which often occurs with large adult lenses. A groove on the side of the lens allows securing with 3.0 orthopedic suture wire or the lens ring may be used. Set includes three lenses, lens ring, forceps and an autoclavable case.

OPV-S

Ocular Pediatric Vitrectomy Lens Set includes:

OPV-B Pediatric Biconcave
92D lens allows clear view of fundus in an air filled vitreous cavity in phakic eyes.

OPV-B

OPV-F Pediatric Flat
For visualizing the central posterior and central vitreous in a fluid filled eye.

OPV-F

OPV-P Pediatric Prism
Allows peripheral viewing beyond the equator with minimal distortion.

OPV-P

OPV-R Pediatric Vitrectomy Lens Ring
Stainless steel ring with two suture down struts.

OPV-FCP Pediatric Lens Forceps
Surgical forceps simplify placement and removal of vitrectomy lenses used with suture down rings.

PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

OCULAR HEXAGONAL VITRECTOMY LENSES

Ergonomically designed hexagonal infusion handle makes these lenses easy to hold and manipulate. Female Luer hub built in to end of handle. Unique ring design keeps infusion cannula out of the surgical field even at steep tilt angles. Four styles: Flat, Biconcave, Magnifying, and Wide Field. Steam Sterilizable. To order a replacement Luer Tube Assembly order the OLTA-2, see accessory section.

Product Code	Style	Image Mag.	Contact Diameter	Static FOV
OHFVE	Flat	1.02x - fluid filled	11.8mm	36°
OHMVE	Magnifying	1.47x - fluid filled	11.8mm	30°
OHBVE	Biconcave	0.80x - air filled	11.8mm	24°
OHWVE	Wide Field	0.49x - fluid filled 1.12x - air filled	11.8mm	48°

OCULAR LANDERS BICONCAVE VITRECTOMY LENS

Designed for vitreoretinal surgery in air filled phakic or pseudophakic eyes. Lens power 83D. Red infusion handle for easy identification. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

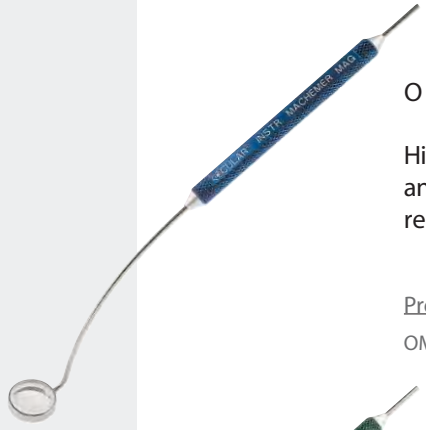
Product Code	Image Mag.	Contact Diameter	Static FOV
OBVI	.80x – air filled	9mm	24°

OCULAR FLAT VITRECTOMY LENS

Used to visualize structures deep in the vitreous cavity or on retinal membranes. Plano anterior surface affords a 36° static field of view of the central posterior pole and vitreous in phakic and pseudophakic eyes. Very lightweight and can be used to tilt or indent the eye during surgery. Purple infusion handle for easy identification. The OPFVI has a smaller contact diameter for pediatric patients. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

Product Code	Image Mag.	Contact Diameter	Static FOV
OFVI	1.02x - fluid filled	10mm	36°
OPFVI	1.02x - fluid filled	7mm	36°

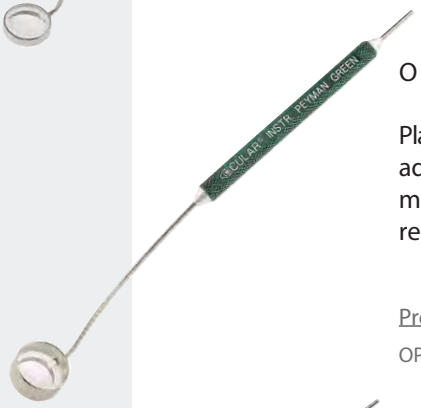
LENSES ON THIS PAGE USE CLEANING METHOD 3



OCULAR MACHEMER MAGNIFYING VITRECTOMY LENS

High magnification for delicate macular surgery. Works with phakic, pseudophakic and aphakic patients. Blue infusion handle for easy identification. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

Product Code	Image Mag.	Contact Diameter	Static FOV
OMVI	1.47x – fluid filled	10mm	30°



OCULAR PEYMAN-GREEN FLUID CELL VITRECTOMY LENS

Plano anterior surface is recessed 3mm. Balanced salt solution or methylcellulose added to the top of the lens creates a wider field of view through a meniscus lens effect. Green infusion handle for easy identification. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

Product Code	Image Mag.	Contact Diameter	Static FOV
OPGVI	1.02x – fluid filled	12mm	36°

OCULAR PEYMAN III WIDE FIELD VITRECTOMY LENS

60D anterior surface for wide angle viewing in phakic and pseudophakic eyes. Allows visualization of the peripheral fundus for endo-photocoagulation in fluid or air filled vitreous. To order a replacement Luer Tube Assembly order the OLTA, see accessory section.

Product Code	Image Mag.	Contact Diameter	Static FOV
OPVI-3	0.49x – fluid filled 1.12x – air filled	12mm 12mm	48°

Journal Reference: Canadian Journal of Ophthalmology, June 1988

OCULAR PEYMAN PEDIATRIC WIDE FIELD VITRECTOMY LENS

A two-piece lens designed for clinical situations where autoclaving is the primary method used for sterilization. Excellent for panoramic viewing of the far peripheral retina for both premature infants and adult patients. Designed to reduce image cropping from lens tilt on the eye. Indirect image - best used with image inverter.

Product Code	Gonio Mag.	Contact Diameter	Static FOV
OPPWV	.50x	7mm	94°

Journal reference: American Journal of Ophthalmology, pp. 236-237, February 2003.

LENSES ON THIS PAGE USE CLEANING METHOD 3

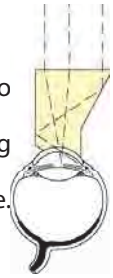
OCULAR DOUBLE MIRROR SURGICAL GONIO LENS

The Ocular Double Mirror Surgical Gonio Lens is designed for easy manipulation during goniotomy and direct viewing gonioscopy procedures, including goniosynechialysis. The two mirror design redirects the oblique gonio image to the coaxial surgical position, allowing the surgeon easy 360° viewing of the anterior chamber. The central view is used to observe instruments passing across anterior chamber. 1.20x image magnification for increased detail of anterior chamber structures. The lens combines the most favorable features of traditional gonioprisms while providing a properly orientated view of the angle. Large limbal aperture to simplify surgery by improving access to clear cornea. Lens is Steam Sterilizable. Works best with coaxial light source.

Product Code	Gonio Mag.	Contact Diameter	Lens Height	Static FOV
ODMSG	1.20x	9mm	49mm	90°

*US Patent #7,419,262 B2

OCULAR MORI UPRIGHT SURGICAL GONIO LENS



The Mori Upright Surgical Gonio Lens is designed for glaucoma procedures, including goniosynechialysis. The two mirror design redirects the oblique gonio image to the coaxial surgical position, allowing the surgeon easy 360° viewing of the anterior chamber. The central view is used to observe instruments passing across anterior chamber. The lens combines the most favorable features of traditional gonioprisms while providing a properly orientated view of the angle. Large limbal aperture to simplify surgery by improving access to clear cornea.

Product Code	Gonio Mag	Contact Diameter	Lens Height	Static FOV
OMUSG	.80x	11.5mm	21.5mm	110°

Journal Reference: AJO, Vol. 143, No. 1, pp. 154-155, January 2007

NEW OCULAR AHMED 1.5X SURGICAL GONIO LENS

All glass design features a magnified view of the anterior chamber angle. A unique optical design corrects for corneal astigmatism for the highest detailed image. Large viewing mirror provides a very wide field of view. Ample access to the cornea. Steam sterilizable. Also available with a handle.

Product Code	Image Mag.	Gonio FOV	Contact Diameter	Handle Length
OASG	1.50x	90°	10mm	NA
OASG-H (w/handle)	1.50x	90°	10mm	72mm

OMUSG USES CLEANING METHOD 1; ALL OTHER PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

OCULAR RITCH PANORAMIC SURGICAL GONIOPRISM

The Ritch Panoramic Gonioprism is a glass lens designed for easy manipulation during goniotomy and direct viewing gonioscopy. The unique design leaves half the cornea closest to the surgeon exposed for use of instruments, incisions, and corneal retraction sutures. The lens provides 160° direct view of the angle. 180° can be seen with minimal rotation of the lens. The lens is steam sterilizable.

Product Code	Gonio Mag	Contact Diameter	Handle Length	Static FOV
ORPSG	.73x	10.8mm	77.5mm	160°

OCULAR SWAN JACOB AUTOCLAVABLE GONIOPRISM

Designed for direct viewing gonioscopy and goniotomy. Small size makes this lens useful for adult and pediatric postoperative gonioscopy. Anodized aluminum handle for easy manipulation. Glass design allows steam sterilization.

Product Code	Gonio Mag	Contact Diameter	Handle Length

OCULAR HILL SURGICAL GONIOPRISM

Designed for easy manipulation during goniotomy procedures and direct viewing gonioscopy procedures. An extended flange helps to fixate the globe during surgical procedures. Wide field of view lens provides a clear view of anterior chamber and anterior chamber angle during implantation and goniotomy procedures. Available in both left hand and right
hand versions.

Product Code	Gonio Mag.	Contact Diameter	Static FOV
OHSG-LH	1.20x	9mm	90°

OCULAR KHAW SURGICAL GONIOPRISM

Creates a bright, clear image of the anterior chamber angle for goniotomy and intra-operative gonioscopy. This unique design features a fixation ring and handle to provide stabilization and easy manipulation of the globe.

Product Code	Image Mag	Contact Diameter	Handle Length
OKSG	1.40x	11.5mm	88.5mm

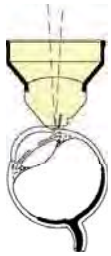
OKSG USE CLEANING METHOD 1; ALL OTHER PRODUCTS ON THIS PAGE USE CLEANING METHOD 3

OCULAR HOSKINS-BARKAN GONIOTOMY LENSES

Designed for transverse goniotomy surgery with the operating microscope, but can also be used as a diagnostic lens. The infant lens is oval and conical in shape, with a 10mm diameter magnified view of the anterior chamber and anterior chamber angle. The premature infant lens is the same in shape and design except the dimension are 1mm smaller for premature infant surgery. An adult size of 11.5mm diameter is also available.

Product Code	Style	Size	Gonio mag
OHBG-1	Infant	10mm	1.30x
OHBG-2	Premature Infant	9mm	1.30x
OHBG-3	Adult	11.5mm	1.30x

OCULAR WELLS SUTURE MANIPULATOR LENS



Lens was designed with a manipulating pin to adjust sclera flap sutures via the conjunctiva, after trabeculectomy procedures. The 1.29x magnification allows clear visualization of sutures and manipulating pin. The pin tip is smooth on all surfaces so that the conjunctiva is not damaged. Pin is tilted 10° towards center of lens to assist in engaging suture. This lens provides a more controlled alternative to laser suture lysis.

Product Code	Image Mag	Contact Diameter	Lens Height
OWSM	1.29x	5mm	22mm

OCULAR LANDERS WIDE FIELD TEMPORARY KERATOPROSTHESIS

A 32D convex anterior surface facilitates viewing of the peripheral retina and posterior pole. 6 suture holes around the peripheral edge of the lens. Sutures hold keratoprosthesis in place and seal the eye for closed system vitrectomy. Two sizes for 7.0 or 8.0 trephination sizes. Vitrectomy lenses may be placed on top of the keratoprosthesis to alter magnification or field of view.

Product Code	Image Mag.	Contact Diam	Static FOV
OLTK-7.2	2.29x	7.2mm	28°
OLTK-8.2	2.29x	8.2mm	30°

Journal Reference: American Journal of Ophthalmology, Vol. 122, No. 4, pp. 579-580, 1996
Ophthalmology, Vol. 102, No. 12, pp. 1932-1935, December 1995

* The Landers Wide Field Temporary Keratoprosthesis is not CE certified.

OCULAR COBO TEMPORARY KERATOPROSTHESIS

The Cobo Temporary Keratoprosthesis is a truncated cone made of quartz and is autoclavable. Built into the keratoprosthesis is a superior groove that allows for suture fixation to the globe. The stainless steel infusion handle is used for injection of either fluid or gas for internal tamponade in the event of intraoperative hemorrhage or serious choroidal hemorrhage. The clear plano anterior surface allows intraoperative visualization of the posterior pole.

Product Code	Contact Diam	Handle Length
OCTK-6.5	6.5mm	40mm

* The Cobo Temporary Keratoprosthesis is not CE certified.

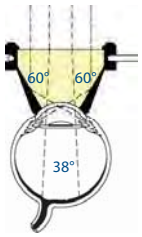
OCTK-6.5 USE CLEANING METHOD 3; ALL OTHER PRODUCTS ON THIS PAGE USE CLEANING METHOD 1

OSHER SURGICAL VIEWING KIT

An ideal combination of lenses to have on hand during cataract surgery. The Osher Surgical Gonio Posterior Pole Lens (OOSGP) gives an easy 360° view of the anterior chamber angle and a magnified view of the posterior pole. The Osher MaxField® 78D Lens (OI-78M) allows a wide field, non-contact view of the retina with minimal adjustment of the surgical microscope.

Product Code
OSVK

OCULAR OSHER SURGICAL GONIO POSTERIOR POLE LENS



Two 60° gonioscopy mirrors. Posterior pole view through the center of lens. Handle design allows easy lens rotation for 360° anterior chamber angle viewing. Steam autoclavable for rapid surgical preparation. Retina image mag 1.02x.

Product Code	Gonio Mag.	Contact Diameter	Static FOV
OOSGP	.84x	14mm	38°

OCULAR OSHER MAXFIELD® 78D

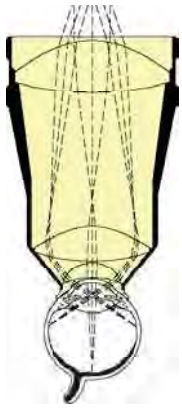
Formerly called the Osher Panfundus Lens. 78D high refractive index glass lens gives wider field than a traditional 78. Very high resolution and wide field for slit lamp fundus examination. Unique design minimizes reflections. Works very well with surgical microscope. Available with red, blue, green, gold, purple, or traditional black holding ring. Now available with our new Laserlight® HD anti-reflective coating. See coatings and materials (page 66) for more details.

Product Code	Image Mag.	Laser Spot Mag.	Static FOV	Dynamic FOV	Working Distance	Clear Aperture	Lens Weight
OI-78M	.77x	1.30x	98°	155°	7mm	27mm	21g

Osher Kit Lenses Also Available Separately.

OOSGP USES CLEANING METHOD 3
OI-78M USES CLEANING METHOD 2

OCULAR STAURENGHI 230 SLO RETINA LENS



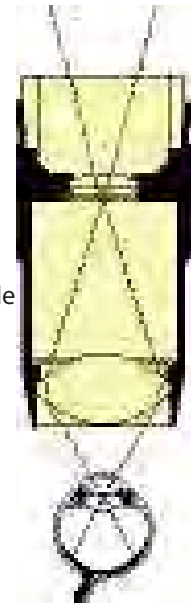
Intended for use in conjunction with a confocal scanning laser ophthalmoscope (SLO) to visualize structures of the retina and ocular fundus. It is optimized for use in obtaining high-resolution wide field fluorescein and indocyanine green angiography images. Effective in obtaining fundus reflectance images with green and infrared light. Beneficial for diagnosis of diabetic retinopathy, peripheral retinal disorders such as hereditary chorioretinal disorders, inflammatory diseases, and to document retinoschisis and retinal detachment.

NEW Staurenghi SLO 13mm Diameter Lens. Excellent for pediatric patients and can be used as a research lens for use in the small eyes of laboratory animals.

Product Code	Contact Diameter	Static FOV	Image Magnification
OSR230	19mm	150°	.23x
OSR230-13	13mm	150°	.23x

Journal reference: Arch Opthalmol, Vol. 123, pp. 244-252, February 2005.

OCULAR LEE-MAINSTER SLO LENS



The Ocular Lee-Mainster SLO Lens doubles the field of view of the Heidelberg Engineering HRA2 (30˚ setting gives 60˚ field of view). Instantaneous wide field of view imaging for peripheral dynamic angiography. Specially coated optics to reduce reflections and provide enhanced image contrast during fluorescein and indocyanine green angiography. Provides wide angle infrared images. Non-contact for ease and comfort of the patient.

Product Code	Image Mag
OSLO60-2	.50x

ALL PRODUCTS ON THIS PAGE USE CLEANING METHOD 1

OCULAR BARRAQUER OPERATING ROOM TONOMETERS

Barraquer Tonometers are based on Maklakov's principle of applanation tonometry. By direct corneal contact, the meniscus ring can be compared to determine intraocular pressure.

OCULAR BARRAQUER 10-15 AND 15-21

Featuring the Terry dual calibration scale. Useful for many surgical applications. Two pressure ranges, 10-15mm Hg or 15-21mm Hg. The 15-21 is an excellent tool for vitreoretinal surgery during gas-fluid exchange.

Product Code	Contact Diam.	Lens Height
OBT-TC-10-15	10mm	23.5mm
OBT-TC-15-21	10mm	23.5mm

OCULAR KASABY BARRAQUER 20-30MM HG TONOMETER

Two reticle ring diameters are calibrated to 20mm Hg and 30mm Hg. Valuable tonometer for comparing post cataract surgery intraocular pressure. Tonometer is made of durable clear acrylic. Can be flash steam autoclaved.

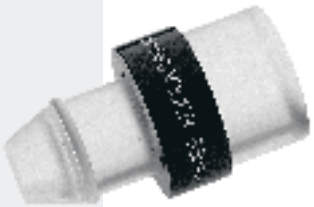
Product Code	Contact Diam.	Lens Height
OKBT-20-30	10.5mm	32.5mm

Journal Reference: Journal of Cataract & Refractive Surgery, Vol. 34, No. 2, pp. 258-261, February 2008

OCULAR GRIFFIN BARRAQUER 30-50MM HG TONOMETER

Two reticle ring diameters are calibrated to 30mm Hg and 50mm Hg. Valuable tonometer for use during Descemet's stripping automated endothelial keratoplasty (DSAEK) procedure. Tonometer is made of durable clear acrylic. Can be flash steam autoclaved.

Product Code	Contact Diam.	Lens Height
OGBT-30-50	10.5mm	32.5mm



OCULAR BARRAQUER 65

65mm Hg calibration scale measures the intraocular pressure when performing LASIK.

Product Code	Contact Diam.	Lens Height
OBT-65	10mm	47mm

OCULAR TONOMETERS USE CLEANING METHOD 4

OCULAR BARRAQUER 65-90

Measures pressures ranging from 65-90mm Hg when performing LASIK. Two engraved ring reticles on the endpoint indicate a predetermined intraocular pressure of 65mm Hg or 90mm Hg. The smaller ring is 90mm Hg.

Product Code	Contact Diam.	Lens Height
OBT-65-90	8mm	72mm

OCULAR BARRON BARRAQUER 65-90

Two engraved ring reticles on the endpoint indicate a predetermined intraocular pressure of 65mm Hg or 90mm Hg. The smaller ring is 90mm Hg. The tonometer is 2.76 inches long and designed to be used with the Barron microkeratome. The 8mm contact tip is useful with small internal diameter microkeratomes.

Product Code	Contact Diam.	Lens Height
OBBT	8mm	67mm

OCULAR BARRAQUER VARLEY 90

90mm Hg calibration scale measures the intraocular pressure when performing LASIK. Compact design provides maximum working distance between tonometer and microscope.

Product Code	Contact Diam.	Lens Height
OBVT	8mm	56mm

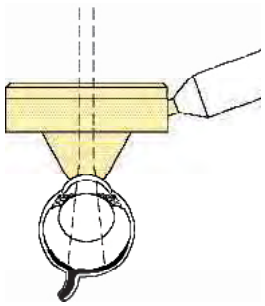
OCULAR BARRAQUER TONOMETER SILICONE RING
(ACCESSORY FOR THE TONOMETERS ABOVE)

Replacement silicone ring, sold in a package of 5.

Product Code
OBT-O

OCULAR TONOMETERS USE CLEANING METHOD 4

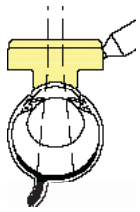
OCULAR 2MM FUNDUS LASER LENS



Provides clear visualization of the ocular fundus and posterior pole. Conical shaped contact design for ease of use. AR coated plano anterior surface helps to reduce reflections and enhance the view. Ergonomic handle design for ease of manipulation. Designed for mice.

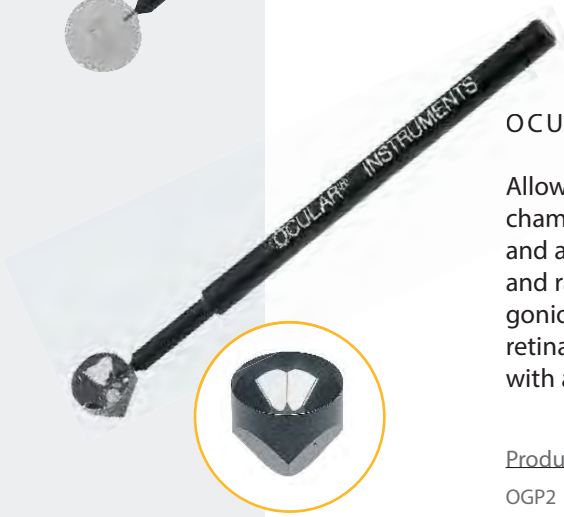
Product Code	Contact Diameter	Lens Height	Handle Length
OFA2.0	2mm	6.7mm	79mm

OCULAR FUNDUS 5.4 LASER LENS



Provides clear visualization of the ocular fundus and posterior pole. Plano anterior surface. Designed for rats.

Product Code	Contact Diameter	Lens Height	Handle Length
OFA5.4	5.4mm	5.9mm	79mm



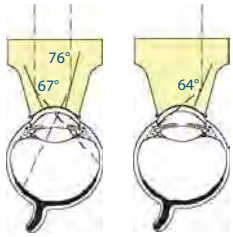
OCULAR 2MM GONIOPRISM LENS

Allows non-invasive visualization of the structures of the anterior chamber angle, including Schlemm's canal, trabecular meshwork, iris and anterior surface of the peripheral ciliary body. Designed for mice and rats but can be used to examine other animals. Excellent for goniophotography. High quality magnified views of the optic nerve, retinal vessels and posterior retina are easily obtained. Also available with a handle.

Product Code	Contact Diameter	Lens Height	Handle Length
OGP2	2mm	8.6mm	NA
OGP2H	2mm	8.6mm	79mm

Journal Reference: Molecular Vision 2000, Vol. 8, pp. 26-31, February 2002

OCULAR KAUFMAN LASER LENS



Designed for visualization and laser procedures of the retina in all species of monkey. Single mirror lens is set at 64°. Two mirror lens has mirrors set at 67° and 76°. Ocular's Laserlight® high efficiency, broad band, anti-reflective coating provides optimal image contrast, minimizes bothersome reflections and maximizes visible near infrared (IR) laser transmission.

Product Code	Contact Diameter	Lens Height
OK2MA	13mm	19.5mm
OKSMA	13mm	19.5mm

OCULAR RESEARCH LENSES USE CLEANING METHOD 1

OCULAR IMAGING EYE MODEL

The most realistic eye model available for Ocular fundus imaging. The unique design incorporates an anterior chamber, crystalline lens, and fundus. Model provides superior demonstration and training of common ophthalmic imaging devices. This eye model incorporates many useful features not available in other eye models, including a retinal detachment showing an elevated retina, a foreign body, optic disc, and blood vessels. In addition, fluorescent features within the eye allow simulated fluorescein imaging. A line at the 180° meridian designates the region of the equator. A peg on the bottom of the model fits into the Ocular Eye Model Bracket (OEMB1) which can be attached to the vertical post of the slit lamp chin rest.

Product Code	Style
OEMI-7	7mm Imaging Eye Model

OCULAR EYE MODEL BRACKET

Designed with a position-adjustable post used to attach the eye model to the vertical post of the slit lamp chin rest.

Product Code

OEMB1

OCULAR TABLE TOP EYE MODEL HOLDER

Holds eye model at 52° angle while allowing free rotation of the eye model. Particularly useful for teaching the use of the binocular indirect ophthalmoscope. For use with OEMF (Discontinued).

Product Code

OEMB2

OCULAR EYE MODEL FILL KIT

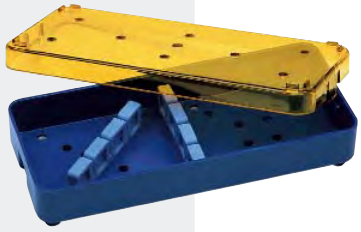
Replacement fill kit includes a 3cc syringe, 21 gauge blunt needle, 1/16 hex key and a bottle of mineral oil. For use with OEMF (Discontinued).

Product Code

OEMFK

OCULAR MULTI-LENS CASES

Walnut lens cases built to your specification. Contact our Customer Service department for a custom lens case order form.



OCULAR INDIRECT STERILIZING TRAY

Sterilizing tray for Ocular Indirect Ophthalmoscopy lenses. It makes ethylene oxide and cold sterilization of lenses quick and easy. This stackable, durable tray gently holds lenses to protect them during sterilization.

Product Code

OI-ST

OCULAR STERILIZATION/DISINFECTION LENS CASES

Sterilization/disinfection cases for Ocular lenses. An excellent choice for the autoclave. Also makes ethylene oxide and cold sterilization of lenses quick and easy. Several sizes available.

Product Code	Style
OLV-C	8 Lens
OLV-C2	2 Lens
OLV-C3	10 Lens
OLV-C3-HRI	10 Lens
OLV-C4	AC, (O4MAC, O4MAC-LR)
OLV-C5	6" x 2.5" x .75"
OLV-C6	6" x 2.5" x 1.25"
OLV-C7	2.65" x 1.54" x 1.75"
OLV-C8	6" x 10" x 1.5"

OCULAR SURGICAL VIEWING SYSTEM CASES

Custom cut foam liner in a heavyweight black plastic case for transport and storage of Ocular Wide Angle Surgical Systems.

Product Code

OIVS-C

OSVS-C

OCULAR LENS CLEANING CLOTH

Light, dry-wipe, silky smooth microfiber cloth with Ocular logo imprint. Vinyl carrying case included. Autoclavable lens cleaning cloth also available.

Product Code	
OLCC	Blue, Traditional
OLCCA	White, Autoclavable

OCULAR GONIOSCOPIC SOLUTION HOLDER

Designed to hold an inverted gonioscopic solution container to minimize air bubbles. Made of heavy PMMA.

Product Code
OGSH

OCULAR MAXAC® (AUTOCLAVABLE) LENS STAND

The lens stand minimizes water spots from the autoclave. Use during sterilization to hold the lens or lens sterilization case on edge.

Product Code
OI-LSA

OCULAR THREE MIRROR LENS FLANGE

Flange designed to be installed on glass Ocular Autoclavable Three Mirror Lens (OG3MAC-10) and Ocular High Definition Three Mirror Lens (OG3MHD-10). Flange made of durable medical polymer, will not break during normal handling and use. Eliminates the need to purchase additional lenses with dedicated flanges. Flange cover is easily removed from the autoclavable glass lens for cleaning and sterilization. Compatible with most common disinfection and sterilization methods including steam sterilization.

Product Code	Flange Diameter
OACF-15	15mm
OACF-17	17mm

OCULAR FOUR MIRROR LENS FLANGE

Flange designed to be installed on the glass Ocular MaxField® Autoclavable Four Mirror Gonio Lens (O4MAC, O4MAC-1X, O4MAC-LR, O4MAC-1X-LR), and the Ocular Gaasterland Four Mirror Gonio Lens (OG4MG, OG4MG-1X, OG4MG-LR, OG4MG-1X-LR). Flange made of durable medical polymer, will not break during normal handling and use. Eliminates the need to purchase additional lenses with dedicated flanges. Flange cover is easily removed from the lens for cleaning and sterilization. Compatible with most common disinfection and sterilization methods including steam sterilization.

Product Code	Flange Diameter
OACF4-15	15mm
OACF4-17	17mm

OCULAR KAPETANSKY WATER BATH

Designed for ultrasound biomicroscopy, the saddle shape of the cup makes an ideal fit for the anterior sclera and thereby minimizes the loss of saline solution. The design makes it easier to install and more comfortable for the patient as compared to other currently used eye cups. In addition, the fluid reservoir attached to the top of the cup provides a depth of saline which is more than adequate for the ultrasonic probe to function properly. Steam Autoclavable.

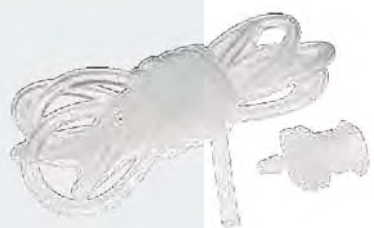
Product Code
OKWB21

OCULAR LENS PROTECTION RINGS

Lens protection rings slip over the top of lenses to guard against accidental scratches. Knurled edges provide a secure gripping surface.

Product Code	Style
OLPR-L	Large Lens
OLPR-M	Medium Lens
OLPR-RIT	Ritch Trabeculoplasty
OLPR-S	Small Lens
OLPR-SUS	Sussman
OLPR-SUS-2	Sussman Large Ring

OCULAR LUER TUBE ASSEMBLY



Replacement Luer Tube Assembly for the vitrectomy infusion handled lenses.

Product Code	Style
OLTA	Replacement part for OBVI, OFVI, OPFVI, OMVI, OPGVI, OPVI-3, OLV-1-IN, OLV-1-IR
OLTA-2	Replacement part for OHBVE, OHFVE, OHMVE, OHWVE

DEVICES	CLEANING		DISINFECTION	STERILIZATION					
	MILD SOAP	ALCOHOL WIPE	DISINFECTION	EO	FLASH AUTOCLAVE	STEAM AUTOCLAVE	ASP STERRAD	STERIS SYSTEM 1E	3M OPTREOZ
CLEANING METHOD 1 All Ocular Laser and Diagnostic Lenses and OKSG, OLIV-EQNA, OLIV-WFNA, OLTK-7.2, OLTK-8.2,OMUSG, OTSG, OUV-132-2, OWIV-HMNA	X		X	X			X	X	X
Note: OMRA-HM and OMRA-HM-2 are not compatible with Steris									
CLEANING METHOD 2 All Ocular MaxField® Glass Indirect Diagnostic/Laser Lenses	X	X	X	X			X	X	X
CLEANING METHOD 2 All Ocular MaxLight® CR-39 Indirect Diagnostic/Laser Lenses	X	X	X	X					X
CLEANING METHOD 3 All Ocular Surgical Lenses and Rings and OI-20A, OI-28A, O4MAC, O4MAC-15, O4MAC-17, O4MAC-1X, O4MAC-1X-15, O4MAC-1X-17, O4MAC-H, O4MAC-1X-H, O4MAC-LR, O4MAC-LR-15, O4MAC-LR-17, O4MAC-1X-LR, O4MAC-1X-LR-15, O4MAC-1X-LR-17, OG3MAC-10, OG3MAC-15, OG3MAC-17	X		X	X	X	X	X	X	X
Note: For products with lumens please consult the sterilization manufacturer for compatibility.									
CLEANING METHOD 4 All Ocular Tonometers	X		X	X	X			X	X

This chart is for general information only. Please see the Ocular Instruments Product Care Instructions which came with your product or are located on our website at www.ocularinc.com for specific product care instructions.

CLEANING - MILD SOAP

Rinse: Immediately upon removal from patient's eye, thoroughly rinse in cool or tepid water to avoid soil drying on surfaces or lumens.

Wash: Place a few drops of low foaming mild soap (i.e., neutral pH (7.0) detergent formulated for medical instruments) on a moistened cotton ball. Gently clean with a circular motion until all soil has been removed. Flush all lumens with detergent solution to remove soil.

Rinse: Thoroughly rinse lens and flush lumens in cool or tepid high purity water, then dry carefully with a non-linting tissue or hospital grade compressed air.

Inspect: Visually inspect all surfaces, crevices, joints, holes and lumens for complete removal of soil and fluid. If any soil or fluid is visible, then repeat cleaning.

Caution: If fluid/gas exchange has occurred, wipe lens with alcohol to remove any trace of oil present. If lens is not promptly and properly cleaned, permanent damage may result.

CLEANING - ALCOHOL WIPE

Wipe: Clean with alcohol wipe.

Then: Proceed with either disinfection or sterilization instructions.

Caution: If fluid/gas exchange has occurred, wipe lens with alcohol to remove any trace of oil present. If lens is not promptly and properly cleaned, permanent damage may result.

DISINFECTION

Disinfectant solutions (e.g., Approved by FDA, DGHM, CE Mark…) may be used in accordance with label instructions of the disinfectant manufacturer. Pay strict attention to disinfectant manufacturers recommended concentrations and contact durations. Ensure that disinfectant solution makes complete contact with all device surfaces and lumens.

After manual high level disinfection, soak and rinse lens in large volume of cool or tepid sterile water for 1 minute and thoroughly flush lumens. Repeat this procedure 2 times with fresh rinse water to ensure removal of disinfection solution.

Caution: To avoid damage to the lens, do not exceed recommended exposure time.

Caution: If used on an ulcerated cornea, lens must be STERILIZED before next procedure.

STERILIZATION

Please see the Ocular Instruments Product Care Instructions which came with your product or are located on our website at www.ocularinc.com for specific sterilization instructions.

ADDITIONAL INFORMATION

Other forms of cleaning and sterilization equipment are available. Please consult instructions of the processing equipment or the manufacturer for compatibility claims. All cleaning and sterilization processes require validation at the point of use.

LASERLIGHT® ANTI-REFLECTIVE COATINGS

OCULAR INSTRUMENTS RECOMMENDS YOU ORDER LENSES WITH

ANTI-REFLECTIVE COATING FOR ALL YOUR DIAGNOSTIC PROCEDURES.

The Laserlight® anti-reflective coatings provided with our indirect and laser lenses minimize reflection and maximize image brightness. The unique hydrophobic properties make Laserlight® coated lenses very easy to clean. Each coating type provides low reflectivity and high transmittance for the entire visible spectrum. Additionally, for non-visible lasers such as Nd:YAG lasers, the coating design has been enhanced for low reflectivity at the specific laser wavelength. In other words, Ocular YAG Lenses are compatible with visible and diode lasers, but Ocular Argon/Diode Lenses are not recommended for use with Nd:YAG lasers.

LASERLIGHT® HD ANTI-REFLECTIVE COATING

The new Laserlight® HD anti-reflective coating was specially designed to minimize reflection on high index lenses. The high definition images that can be achieved with this coating are ideal for digital imaging applications. Reflections are reduced 50-80% compared with traditional coatings. Laserlight® HD significantly increases image brightness and maximizes laser efficiency. Laserlight® HD has a more spectrally neutral reflection and yields a more natural image color palette. It surpasses MIL-C-48497 standard for coating durability and is highly scratch resistant.

CONSIDER SOME OF THE BENEFITS OF ANTI-REFLECTIVE COATINGS…

Minimum reflection and enhanced image quality are essential considerations for slit lamp examinations. Many eye doctors are converting to exclusive use of laser lenses for diagnostic use because of significantly greater image clarity and resolution. For laser application, transmission of the treatment beam is maximized. This is important for optimizing the interaction of the laser energy with the target tissue. Reflectance of the aiming beam and slit lamp source is minimized. Although there is certainly a safety factor added by reducing these reflections, the primary benefit is an increase in image contrast and resolution of the treatment area.

LENS MATERIALS

OPTICAL COMPONENTS

All Ocular Instruments lenses are designed and manufactured using the finest grade optical polymers and glasses. Materials are chosen that best meet the performance requirements of each design. Total system design encompasses the primary requirements of optical image quality, sterilization method, durability and the essential elements of ergonomics, weight, and cost.

LATEX FREE PRODUCTS

Ocular Instruments products do not contain latex.

GUARANTEE

At Ocular Instruments, we take great pride in our reputation for manufacturing the world's highest quality ophthalmoscopic lenses. If, for any reason, an Ocular Instruments product does not meet your requirements or expectations, you may return it to us within 30 days of purchase for a full refund. Please contact Customer Service for a return authorization number.

All Ocular Instruments products are unconditionally guaranteed against defects in materials and workmanship within 1 year of the invoice date.

ORDERS

Please contact your authorized Ocular Instruments distributor or contact us directly via mail, telephone, fax, email, or our web site. State complete description and product code. Please provide complete Shipping and Billing addresses with your order.

PAYMENT TERMS

Visa, Mastercard and American Express accepted for purchases under $2,000.
Net 30 days upon credit approval.

SHIPMENT OF GOODS

Shipment of products is made by FedEx, air freight or USPS; F.O.B. shipping point. Bank fees, insurance and documentation charges are added when applicable. If shipment is prepaid, all costs are added to the invoice. All standard orders will be shipped within 5 business days unless notified otherwise.

RETURN GOODS POLICY

Merchandise is returnable for credit only with prior authorization from Ocular Instruments. It is recommended that all shipments to Ocular Instruments be made via UPS, prepaid and insured for full value. Please clean and disinfect all products prior to returning. If returning lens from outside the U.S., please ensure all applicable duties and taxes fees are paid by the sender. Ocular Instruments is not responsible for incoming duties and taxes.

REPAIR SERVICE

We offer full service repair for all of our products. We will inspect each item to determine if it is repairable. "Repairable" means that we can restore the product to a safe and effective condition in accordance with our quality system. If your product is repairable, we will provide a price quotation for your approval prior to performing the repair. In most cases, a repaired product will be restored to almost new condition. In order to expedite the repair process, please contact Customer Service for a return authorization number.

ALPHABETICAL INDEX

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Toll-free USA: 800-888-6616

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Email: contact@ocularinc.com

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Future

Ocular offers so many products because of our more than 40 year working relationship with ophthalmologists around the world. We have worked with you and your ideas to create new and innovative products to keep up with the changing needs of the industry.

We are honored by the longstanding relationships we maintain with many ophthalmologists of great prominence, whose names are associated with many ocular lenses used daily throughout the world.

Share your new product ideas with Ocular's Research and Development department. We consider it a privilege to work with you to advance the profession of ophthalmology. And who knows – your name could be the next to appear on an Ocular product!

We look forward to hearing from you. If you have a product idea, contact our R&D department:
Toll-Free: (800) 888-6616

Stay up-to-date on the latest Ocular products and innovations by signing up for our e-newsletter at: ocularinc.com

Ocular® Instruments

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