## OCULUS | SDI® 4/BIOM® 5

Wide Angle Observation



# The OCULUS BIOM® 5

Perfect View for Non-Contact Wide Angle Observation

- > The OCULUS BIOM® was a revolution in vitreoretinal surgery and forever changed fundus viewing.
  - > The Original: Made in Germany, made by OCULUS.
- > The BIOM® 5 series continuously incorporates the principle of indirect ophthalmoscopy in the operating microscope.



## The Next Evolution in Non-Contact Wide Angle Observation



### Efficiency Meets Function

Surgeons appreciate the easy handling of the BIOM<sup>®</sup> 5. While observing the vitreous and the fundus the BIOM<sup>®</sup> 5 is aligned coaxially with the operating microscope. During extraocular phases of surgery it is swung out of the observation beam while the inverting action of the SDI<sup>®</sup> is neutralised: Automatically, by a surgeon controlled footswitch or manually.

#### Intelligent

The convenience of automatic inversion provided by the SDI<sup>®</sup> 4c ensures the surgeon's view is always orientated properly. This is accomplished by OCULUS' patented design, utilising a fully autoclavable micro switch.

> Intelligent activation of the SDI® 4c

### BIOM® 5c (With Electronic Focus)

When used with the SDI<sup>®</sup> 4c the BIOM<sup>®</sup> 5c offers the convenience of electronic foot pedal focusing and intelligent and automatic image inversion.



> BIOM<sup>®</sup> 5c in working position

## **OCULUS BIOM® 5**

## The Advantages



### Slim and Sleek

The slim and open design is lightweight and increases accessibility for the surgeon's hands and instruments as well as reprocessing. Space consumption in the operating field is also minimised.



## **Optimized Surgical Efficiency**

The reduction lens is designed to optimise the view of the retina and the limbus without the need to refocus during extraocular phases of surgery.



## Precision Engineered for Maximum Accuracy

OCULUS' high design and manufacturing standards ensure greater stability and precision. Selected materials, including titanium, offer increased durability, with excellent resistance to today's rigorous and sometimes harsh sterilisation methods.



## Wide-Field in High Definition

The OCULUS BIOM<sup>®</sup> HD Disposable Lens is designed to provide superior clarity with wide-angle viewing. This unique design also provides high definition during high magnification, reducing the necessity of a separate lens for macula work.



## Compatibility and Continuity

The BIOM<sup> $\circ$ </sup> 5 is interchangeable with most accessories of the earlier BIOM<sup> $\circ$ </sup> 3 and BIOM<sup> $\circ$ </sup> 4 versions. Also special adapter available to use it on microscopes equipped with Zeiss Resight<sup> $\circ$ </sup>.

## Still the Best: OCULUS SDI® 4

## Stereoscopic Diagonal Inverter

- > High transmission glass optics
  - > Slim design for reduced microscope stack height
  - > Integrates into most ophthalmic microscopes

## Automatic Inversion

Motorized Inversion

For use with the BIOM<sup>®</sup> 5m

Surgeon controlled electronic inversionIntegration into most microscope foot pedals

- Intelligent automatic inversion activated by the position of the BIOM<sup>®</sup> 5c
- Surgeon controlled electronic focus when combined with the BIOM<sup>®</sup> 5c
- Multiple BIOM<sup>®</sup> connectors for increased flexibility and convenience





## Manual Inversion

- For use with the BIOM<sup>®</sup> 5m
- No power supply, cables or foot pedal required



### **BIOM®** Connecting Spacer

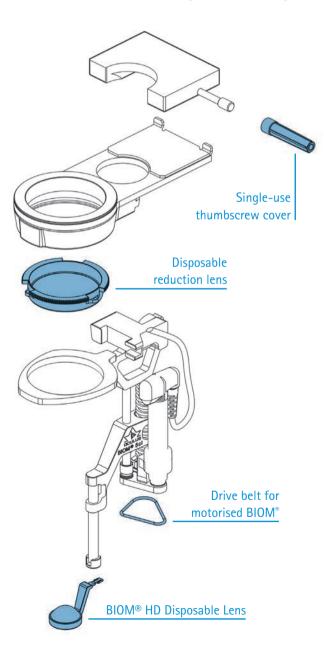
If your microscope already incorporates a stereoscopic diagonal inverter, you don't have to miss out on the benefits of the OCULUS BIOM<sup>®</sup> 5c and BIOM<sup>®</sup> 5cl. Ask the OCULUS team about the BIOM<sup>®</sup> Connecting Spacer.

## The OCULUS BIOM® Optic Set

## Enhancing 3D visualization systems

The OCULUS BIOM<sup>®</sup> HD Disposable Lens combines an extremely wide field of view with high definition clarity. This makes it ideal for all stages of vitreoretinal surgery including macula viewing under high magnification.

- Innovative single-use design by OCULUS ensures a perfect view in every case
- 130° wide angle field of view
- Outstanding resolution in periphery whether in a fluid filled eye or under air
- HD clarity under high magnification reduces the need for a contact lens when working in the macula region
- Superb depth of field even under high magnification
- Single-use design for increased O.R. efficiency and lower costs
- Compatible with all OCULUS BIOM<sup>®</sup> 3/4/5
- Ideal for 3D Heads-up applications





> The convenient and sterile blister package is easy to handle. It includes thumbscrew cover and drive belts for the motorized BIOM<sup>®</sup> version.



> BIOM<sup>®</sup> HD Disposable Lens: Innovative design ensures a perfect view in every case.

## **BIOM® 5 Accessories**



### Easy Sterilization

Customized sterilization tray for all steam autoclavable BIOM<sup>®</sup> 5 parts.



 $> {\it Complete sterilization container packed with BIOM^{\circ} 5}$ 



 $> {\it BIOM}^{\circ}$  5 tray also available for STATIM 5000 G4

# OCULUS SDI® 4/BIOM® 5

### Wide Variety of BIOM® Lenses

	Max. observation angle	Outer diameter	Steam autoclavable with temperature of	Features
Mini Wide Field Lens	approx. 70°	12 mm	134° C	small/deep seated or infants' eye
Hi Res Macula Lens	approx. 60°	19 mm	134° C	for high magnification
90 D Lens	approx. 90°	19 mm	134° C	intermediate field
Wide Field Enhanced Lens	approx. 120°	19 mm	134° C	wide field
Wide Field High Definition Lens	approx. 60° - 130°	20 mm	134° C	high resolution combined with wide field of view
WiFi HD Mini	approx. 60° - 110°	17 mm	134° C	wide field of view with reduced diameter

## Combinations of BIOM® Optic Sets (disposable)

Objective lens	BIOM®	BIOM <sup>®</sup> Optic Set (disposable)
f = 175 mm	BIOM <sup>®</sup> 3 m/c, 4 m/c, 5 m/c	HD Professional for $f = 175 \text{ mm}$
f = 200 mm	BIOM <sup>®</sup> 3 ml/cl, 4 ml/cl, 5 ml/cl	HD Professional for $f = 200 \text{ mm}$
	BIOM <sup>®</sup> 3 m/c, 4 m/c, 5 m/c	HD Flex

### Adaptions

SDI® 4/BIOM® 5 adaptations are currently available for the following microscope types:				
Alcon	LuxOR*			
Huvitz	HOM-700			
Kaps	SOM			
Leica	M500/M501, M620, M650, M690, M841, M820, M822*, M844*, Proveo 8*			
Möller	Ophtamic 900, Hi-R 900, Hi-R NEO 900, EOS 900, Allegra 900			
Takagi	OM-18, OM-9, OM-8			
Topcon	OMS-110, OMS-600, OMS-610, OMS-650, OMS-710, OMS-800 Standard, OMS-800 Pro, OMS-850 Standard, OMS-850 Pro			
Zeiss	OPMI VISU 150/160, VISU 200/210, Lumera® 700, Lumera® T, Lumera® i, Lumera® 300, OPMI CS with Retrolux 1/3/CS or with Retroskop 1/2/CS, OPMI MDI/MD0/MDU, OPMI 1/6			

Specific: All SDI® 4c/BIOM® 5c functions can be controlled with the foot pedal of Leica M844/M822/Proveo 8 surgical microscope and ALCON LuxOR<sup>™</sup> Ophthalmic microscope.

Slitlamp adaptions on request.

( E in accordance with Medical Device Directive 93/42/EEC

#### WWW.OCULUSSURGICAL.COM

OCULUS Optikgeräte GmbH Postfach • 35549 Wetzlar • GERMANY Tel. +49-641-2005-0 • Fax +49-641-2005-299 Email: support@oculussurgical.de • www.oculussurgical.com

- OCULUS Surgical USA, info@oculussurgical.com
- OCULUS Asia, info@oculus.hk
- OCULUS Czechia, oculus@oculus.cz
- OCULUS Iberia, info@oculus.es
- OCULUS Poland, biuro@oculus.pl
- OCULUS Turkey, info@oculus-turkey.com.tr



30/0317/EN/FR



OCULUS is certified by TÜV according to DIN EN ISO 13485