

Simply visionary.

BOA
VISION

COBRA
VISION

MAMBA
VISION



Flexible Sensor Endoscopes

for ENDOCAM® Logic HD



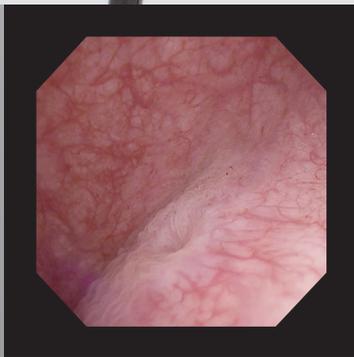
Flexible Sensor Cystoscope

Ultimate flexibility meets sensor technology.

Introducing Richard Wolf's newest flexible sensor endoscope for the ENDOCAM® Logic HD camera system. The **MAMBA vision** offers 210° bidirectional deflection, allowing the surgeon to easily visualize and navigate the bladder.

Featuring a slim outer sheath, 11.5 Fr. atraumatic distal tip, and a large 7.5 Fr. working channel, the **MAMBA vision** provides enhanced patient comfort without sacrificing irrigation. Its cutting-edge sensor technology generates a brilliant image and its lightweight, ergonomic handle helps ensure ease of use throughout a procedure.

Cystoscopy



Sensor Cystoscope Picture



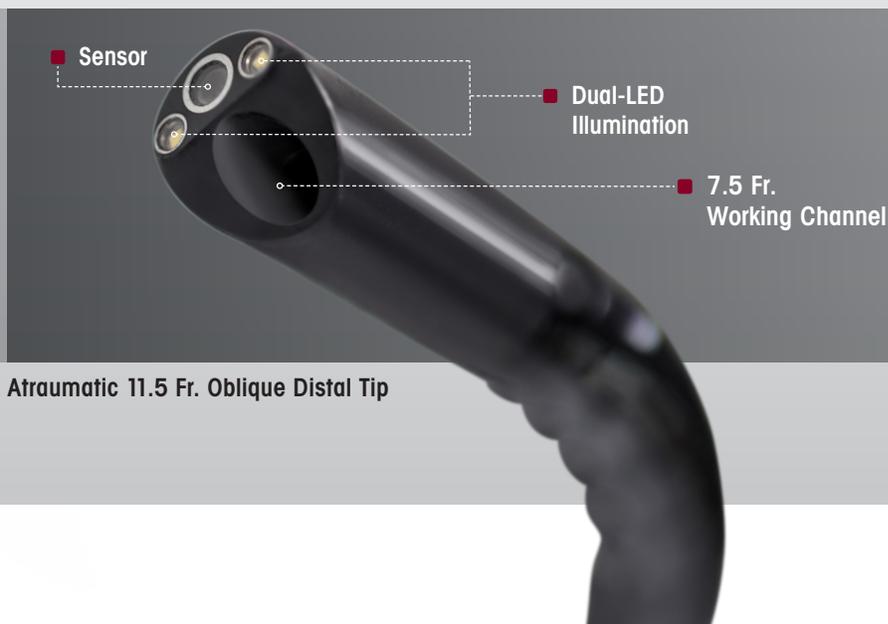
210° Bidirectional Deflection



mamba VISION

Flexible Sensor Cystoscope

- 210° bidirectional deflection for precise control and navigation.
- Large 7.5 Fr. working channel for optimal irrigation.
- Atraumatic 11.5 Fr. beveled distal tip for easy insertion and enhanced patient comfort.
- 16.2 Fr. sheath.
- Two distally-integrated LEDs for superior illumination.
- Two programmable camera buttons.
- Special Imaging Modes (SIM).
- Ergonomic handle and axial cable.



Atraumatic 11.5 Fr. Oblique Distal Tip



Single-Channel Flexible Sensor Ureteroscope

The multifaceted instrument for all-around application.

Ureteroscopy

Engineered with Richard Wolf's latest sensor technology, the **BOA vision** produces a crisp, clear image of the upper and lower urinary tract. Its stiff shaft, slim 6.6 Fr. distal tip, and 270° bidirectional deflection make this flexible ureteroscope ideal for complex anatomy.

Featuring a 3.6 Fr. working channel, the **BOA vision** can be inserted through an access sheath as small as 9.5 Fr.



Sensor Ureteroscope Picture



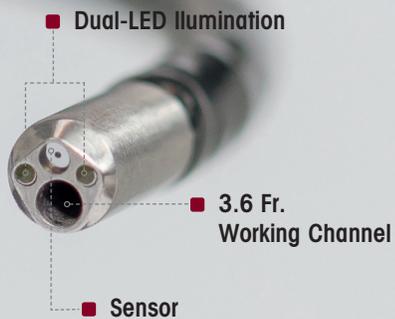
9.5 Fr.

Compatible with a 9.5 Fr. Access Sheath

Boa
VISION

**Single-Channel Flexible
Sensor Ureteroscope**

- Compatible with a 9.5 Fr. access sheath.
- 270° bidirectional deflection.
- 3.6 Fr. working channel.
- Atraumatic 6.6 Fr. beveled distal tip for easy insertion.
- 8.7 Fr. sheath.
- Integrated LED illumination and distal image sensor.
- Two programmable camera buttons.
- Special Imaging Modes (SIM).
- Ergonomic handle and axial cable.



Atraumatic 6.6 Fr. Oblique Distal Tip



270° Bidirectional Deflection



Dual-Channel Flexible Sensor Ureteroscope

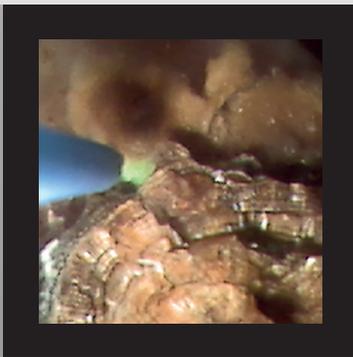
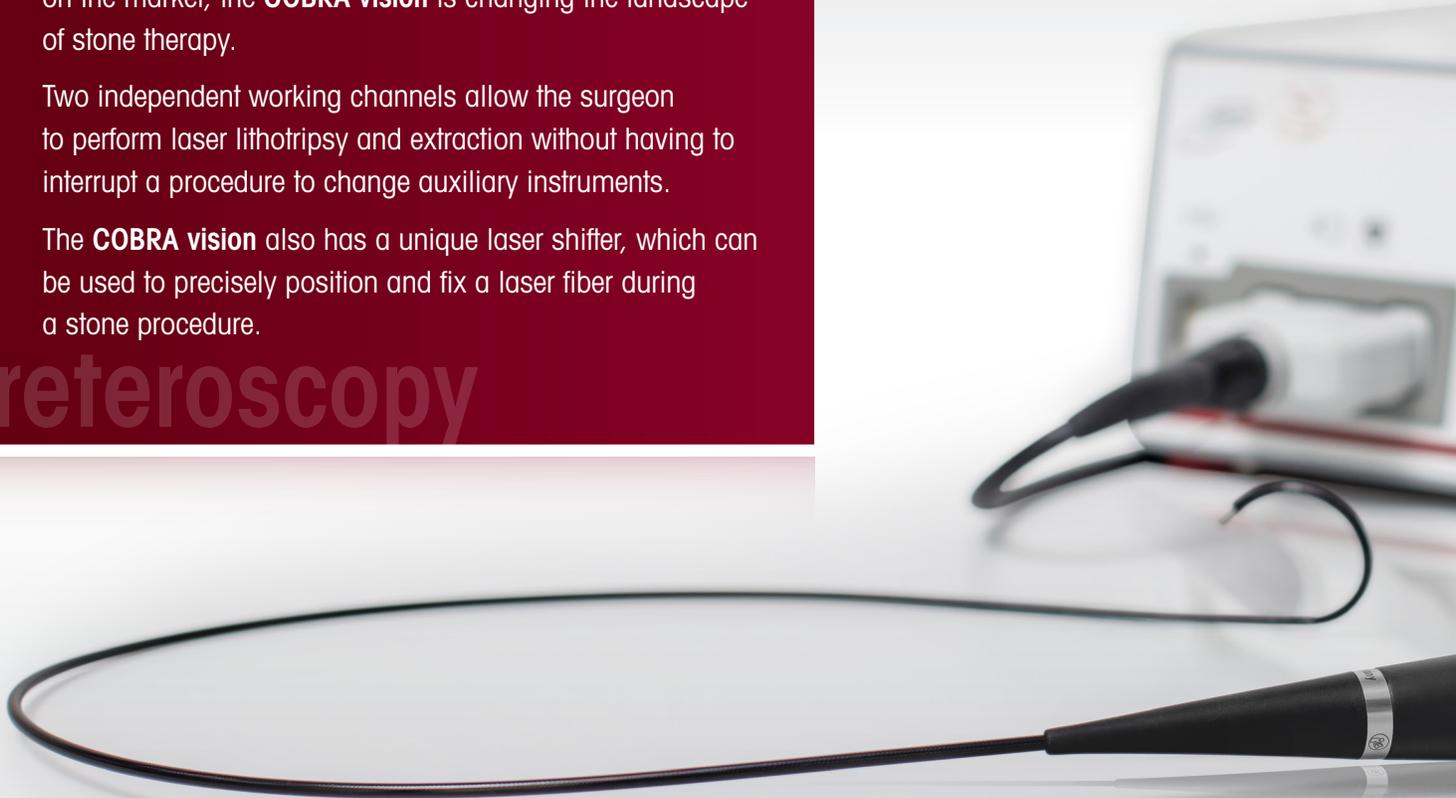
Optimizing stone therapy.

As the first and only dual-channel sensor ureteroscope on the market, the **COBRA vision** is changing the landscape of stone therapy.

Two independent working channels allow the surgeon to perform laser lithotripsy and extraction without having to interrupt a procedure to change auxiliary instruments.

The **COBRA vision** also has a unique laser shifter, which can be used to precisely position and fix a laser fiber during a stone procedure.

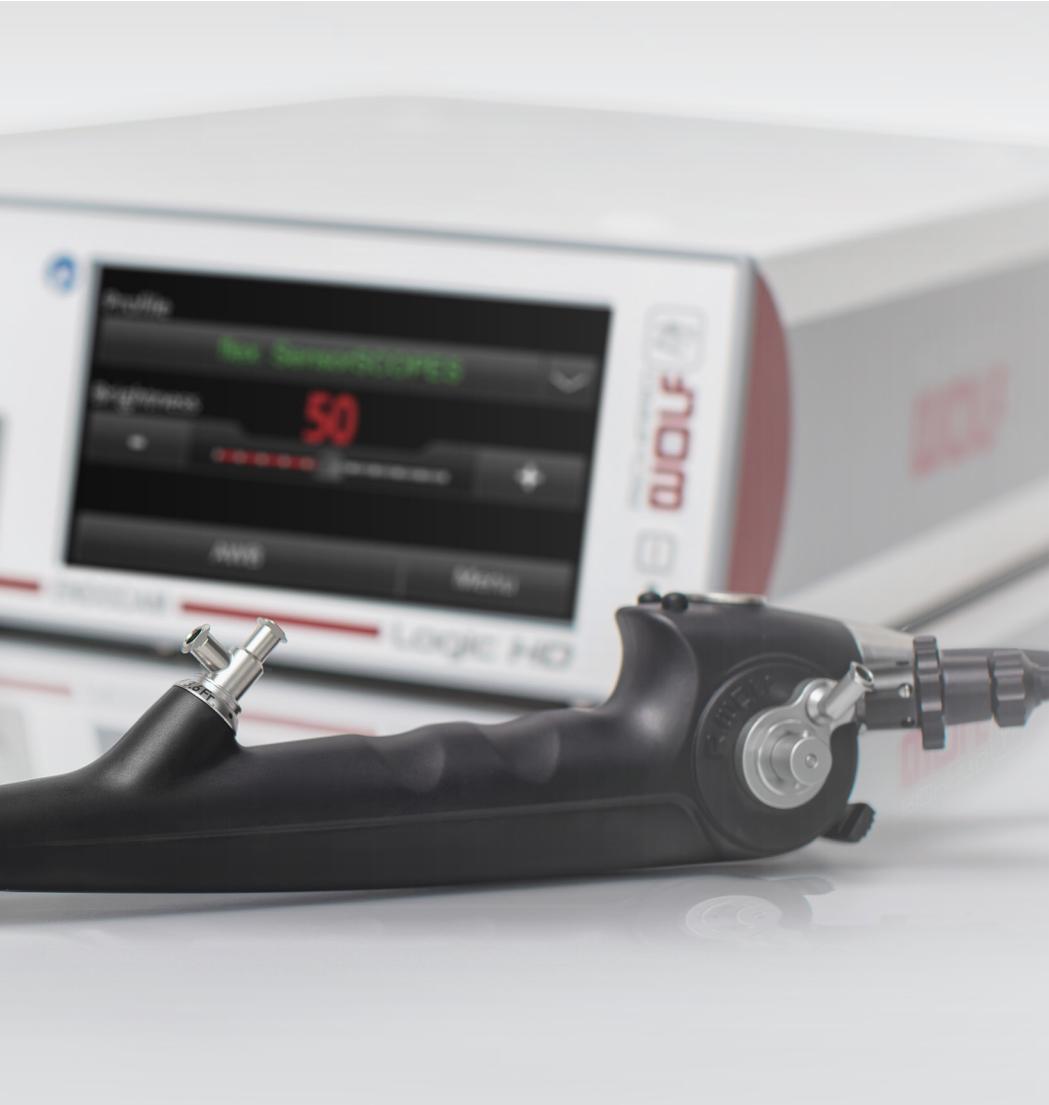
Ureteroscopy



Sensor Ureteroscope Picture



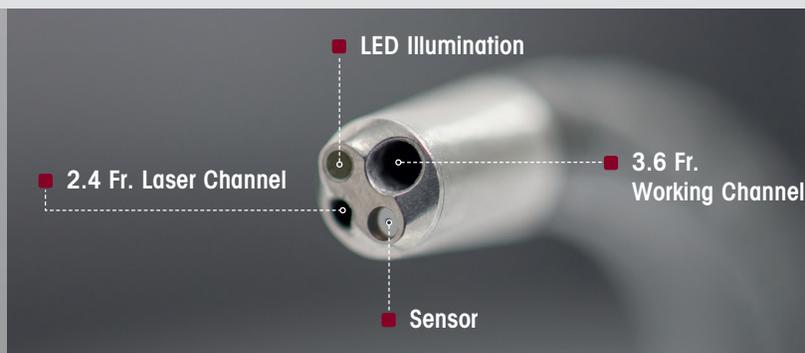
Two Independent Channels



COBRA VISION

Dual-Channel Flexible Sensor Ureteroscope

- 270° bidirectional deflection.
- Two independent channels (3.6 Fr. and 2.4 Fr.) for the simultaneous use of tipless baskets and laser fibers.
- Atraumatic 5.2 Fr. beveled distal tip for easy insertion.
- 9.9 Fr. sheath.
- Integrated LED illumination and distal image sensor.
- Two programmable camera buttons.
- Special Imaging Modes (SIM).
- Ergonomic handle and axial cable.



Atraumatic 5.2 Fr. Oblique Distal Tip

ENDOCAM® Logic HD

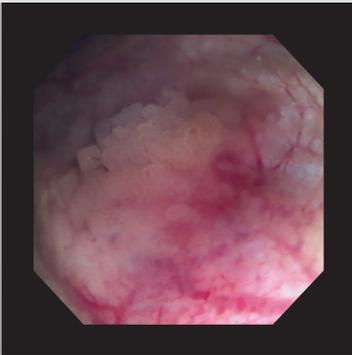
The future is logic.

Brilliant high-definition visualization awaits. Compatible with all three endoscopes in the vision family, the ENDOCAM® Logic HD is an intuitive, user-friendly camera platform ready to meet all your OR imaging needs.

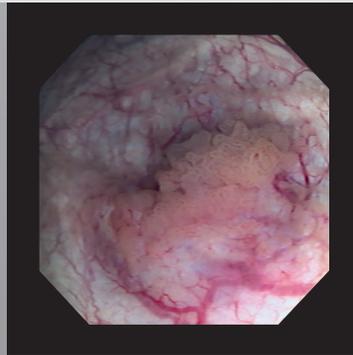
The ENDOCAM® Logic HD is a true plug-and-play system, allowing the user to plug any Richard Wolf flexible sensor endoscope directly into the camera control unit. The built-in touchscreen offers intuitive control as well as the ability to make quick setting changes and create custom user profiles.



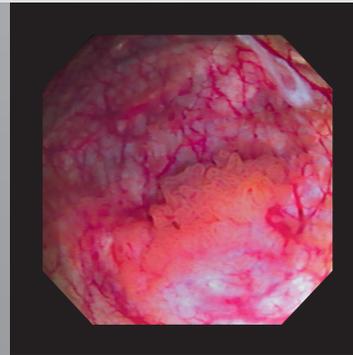
ENDOCAM® Logic HD
Camera Control Unit



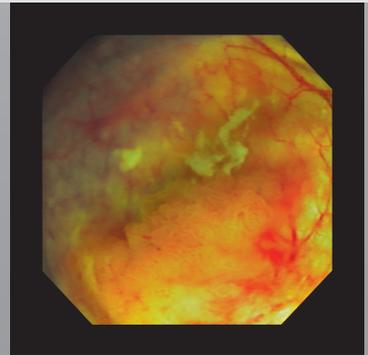
STANDARD
Natural color display.



COLOR CONTRAST I
Differentiated color display and contrast enhancement in images with a high proportion of red.



COLOR CONTRAST II
Differentiated color display and contrast enhancement in pale images.



COLOR CONTRAST III
Strongly differentiated color display and contrast enhancement in pale images.



ENDOCAM® Logic HD

- **Sustainable Technology**

The camera control unit's USB port enables in-field software updates, ensuring the system is always in sync with our latest video technologies.
- **Exceptional Flexibility**

The ENDOCAM® Logic HD is fully compatible with all Richard Wolf C-MOS sensor endoscopes as well as 3-CCD and 1-CCD camera heads.
- **User-Friendly Interface**

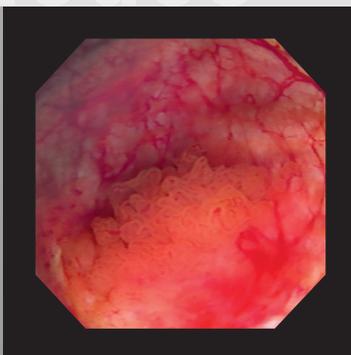
The camera control unit's built-in touchscreen provides ease-of-use and intelligent menu navigation.
- **Tailored Visualization**

The ENDOCAM® Logic HD is equipped with several preset surgical profiles that have been field-tested to deliver vivid images for various endoscopic procedures, including cystoscopy, ureteroscopy, and resection.

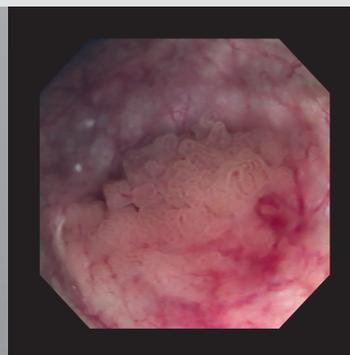
Special Imaging Modes: The Difference is in the Detail

Richard Wolf's vision family of sensor endoscopes allow the user to select, at the touch of a button, one of several SIM modes, each designed to help facilitate easier tissue differentiation.

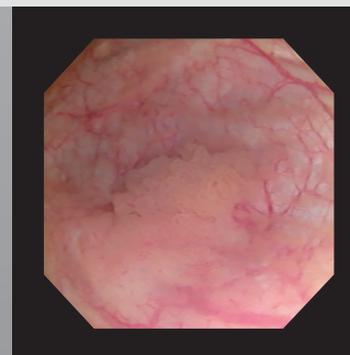
Modes



CONTRAST I
Intensified color display and contrast enhancement in pale images.



CONTRAST II
Subdued color display for strongly saturated images. Reduced color intensity.



HIGH DYNAMIC RANGE (HDR)
Reduction of overexposures and lightening of shadows.

Flexible Sensor Endoscopes

Technical Specifications

	MAMBA vision Flexible Sensor Cystoscope	BOA vision Single-Channel Flexible Sensor Ureteroscope	COBRA vision Dual-Channel Flexible Sensor Ureteroscope
Number of working channels	1	1	2
Sheath	16.2 Fr.	8.7 Fr.	9.9 Fr.
Distal tip	11.5 Fr. atraumatic, plastic	6.6 Fr. atraumatic, stainless steel	5.2 Fr. atraumatic, stainless steel
Working/irrigation channel	7.5 Fr.	3.6 Fr.	3.6 Fr.
Laser/irrigation channel	–	–	2.4 Fr.
Deflection	210° bidirectional	270° bidirectional	270° bidirectional
Working length	400 mm	680 mm	680 mm
Angle of view	110°	90°	90°
Lighting	Two distally-integrated LEDs	LED integrated into handle	LED integrated into handle
Handle	Ergonomic handle with axial camera cable	Ergonomic handle with axial camera cable	Ergonomic handle with brake (for locking the instrument tip) and axial camera cable
Position of working/irrigation channel in endoscopic image	3 o'clock	9 o'clock	6 o'clock
Position of laser/irrigation channel in endoscopic image	–	–	9 o'clock
Endoscopic image	Octagon, 3-step detail enhancement and 6-fold digital zoom, automatic white balance, light control and focus	Square, 6-fold digital zoom, automatic white balance, light control and focus	Square, 6-fold digital zoom, automatic white balance, light control and focus
Compatible camera systems	ENDOCAM® Logic HD ENDOCAM® Logic HD <i>lite</i>	ENDOCAM® Logic HD ENDOCAM® Logic HD <i>lite</i>	ENDOCAM® Logic HD ENDOCAM® Logic HD <i>lite</i>

Ordering Information

	MAMBA vision	BOA vision	COBRA vision
Logical Deflection (control lever down, distal tip down)	MAMBA vision Bundle 73150011 <i>Includes:</i> MAMBA vision flexible sensor cystoscope (7315001)	BOA vision Bundle 73550711 <i>Includes:</i> BOA vision single-channel flexible sensor ureteroscope (7355071)	COBRA vision Bundle 73560711 <i>Includes:</i> COBRA vision dual-channel flexible sensor ureteroscope (7356071)
Ergonomic Deflection (control lever down, distal tip up)	MAMBA vision Bundle 73150061 <i>Includes:</i> MAMBA vision flexible sensor cystoscope (7315006)	BOA vision Bundle 73550761 <i>Includes:</i> BOA vision single-channel flexible sensor ureteroscope (7355076)	COBRA vision Bundle 73560761 <i>Includes:</i> COBRA vision dual-channel flexible sensor ureteroscope (7356076)
	<i>Included with each bundle:</i> Leak tester (163.903) Pressure equalization valve (163.904) Disposable cleaning brush (pack of 100) for working channel (7990004) Luer sealing cap (15023205) Irrigation set V (163910)	<i>Included with each bundle:</i> Leak tester (163.903) Pressure equalization valve (163.904) Disposable cleaning brush (pack of 10) for working channel (7990001) Irrigation set V (163910)	<i>Included with each bundle:</i> Leak tester (163.903) Pressure equalization valve (163.904) Disposable cleaning brush (pack of 10) for working channel (7990001) Disposable cleaning brush (pack of 10) for laser channel (7990003) Clamping element (pack of 20), orange (15394144) Adapter (163914) 2 x irrigation set V (163910)

ENDOCAM® Logic HD Bundle 55251061

Includes:

ENDOCAM® Logic HD camera control unit (5525106), remote control (5525401), 8 GB USB stick (56540028), 3.0 m HDMI / DVI-D cable lockable (103843), power cable (N710171)

