

# EXCELLENCE INSIDE IN FLUORESCENCE IMAGING



FLEXIVISION® NIR FI IN MEDICAL ENDOSCOPY

11-Nov-2021

**Schölly**<sup>®</sup>  
EXCELLENCE INSIDE

## FLEXIVISION® FAST AND FRICTIONLESS PATH TO YOUR NIR FI MARKET.

Our system offers an excellent price/performance ratio and focuses on NIR FI features with high clinical relevance.

There is currently no OEM NIR FI system with comparable functionality in this price segment. By adding this system to your MIS portfolio, you can quickly and frictionlessly gain market share. Sell it under your name and secure your future endoscopy business with us.

Fluorescence imaging technology has the potential to change the way many surgical procedures are performed. Convince hospitals of the good performance of this system at a comparably low investment and thus contribute to our mission to make NIR FI a standard in medical care.



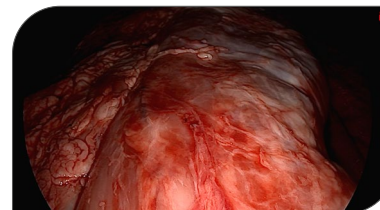
## EXCELLENCE INSIDE IN NIR FI TECHNOLOGY.

### FLEXIVISION®

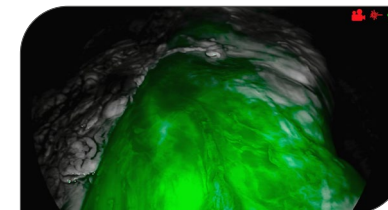
#### NEAR-INFRARED FLUORESCENCE IMAGING (NIR FI)

This NIR FI visualization system offers real-time NIR FI in combination with brilliant (ultra) high-definition white light video with our FlexiVision 4K and HD camera platform.

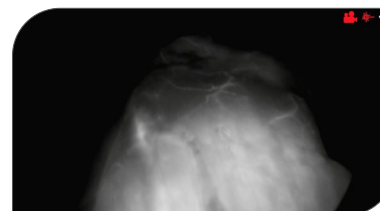
With its multiple NIR FI modes it assists surgeons in clinical decision making during minimally invasive surgery. Proven benefit for intraoperative assessment of tissue perfusion, identification of biliary structures and lymph nodes during oncological procedures with NIR fluorescence dye Indocyanine Green (ICG).



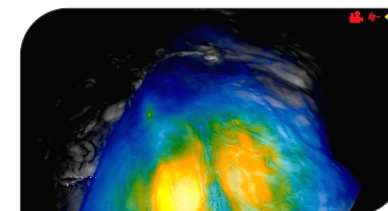
WHITE LIGHT IMAGE



NIR GREEN MODE



NIR CONTRAST MODE



NIR INTENSITY MODE

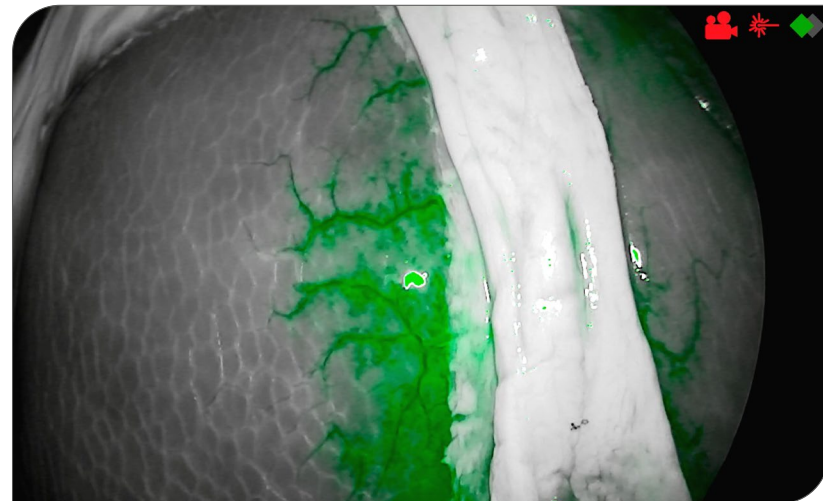
## EXCELLENCE INSIDE IN NIR FI TECHNOLOGY.

### INDOCYANINE GREEN (ICG)

Indocyanine Green (ICG) is a fluorescent dye that's administered to the patients' blood vessels or directly into tissue. Excitation light coming from the NIR FI Light Source is at 805 nm. The fluorescence response of the ICG is displayed in real time on the monitor.

### LASER TECHNOLOGY

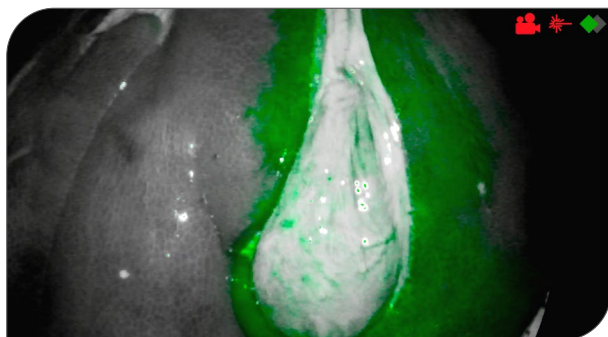
The NIR FI system includes a low pass filter that allows laser light and a part of the LED light to pass in NIR FI mode. The filter in the endoscope filters out the NIR reflection before displaying the picture on the monitor. It allows the fluorescence response of the ICG to pass.



# IMAGING MODES



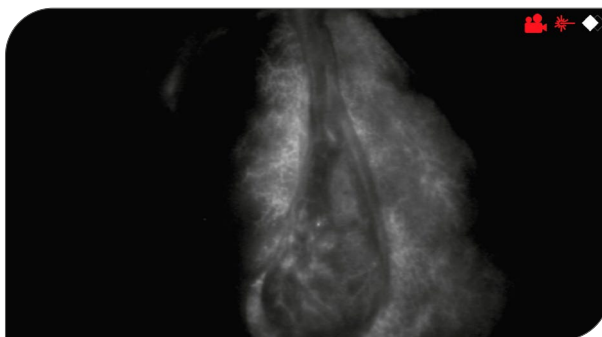
White light image is displayed in grayscale with NIR fluorescence indicated and overlaid in green.



- High-contrast visualization of targeted tissue structures with intensive green colored fluorescence
- Grayscaled background image allows focused view of the fluorescent structures
- Optimal for delineation of tissue structures for perfusion assessment and biliary duct visualization



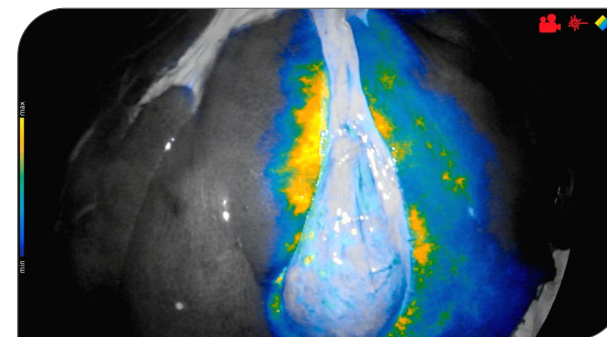
NIR fluorescence indicated by the color white and all other areas of the image appear dark.



- Highest-contrast visualization of NIR fluorescence shown on a black background
- Pure NIR fluorescence signal provides the clearest demarcation possible (anatomic background not visible)
- Freedom of light reflexion
- Optimal for demarcation of perfusion assessment and biliary duct visualization



White light image is displayed in grayscale with NIR fluorescence indicated and overlaid with a multi-color intensity scale.



- Relative intensity of the NIR signal is displayed by using a multi-color scale
- High-contrast visualization of signal gradients between weak and strong NIR signals
- Powerful tool for delineation of (sentinel) lymph nodes against surrounding fluorescence signal

## SYSTEM OVERVIEW

### NIR FI CCU 4K HD

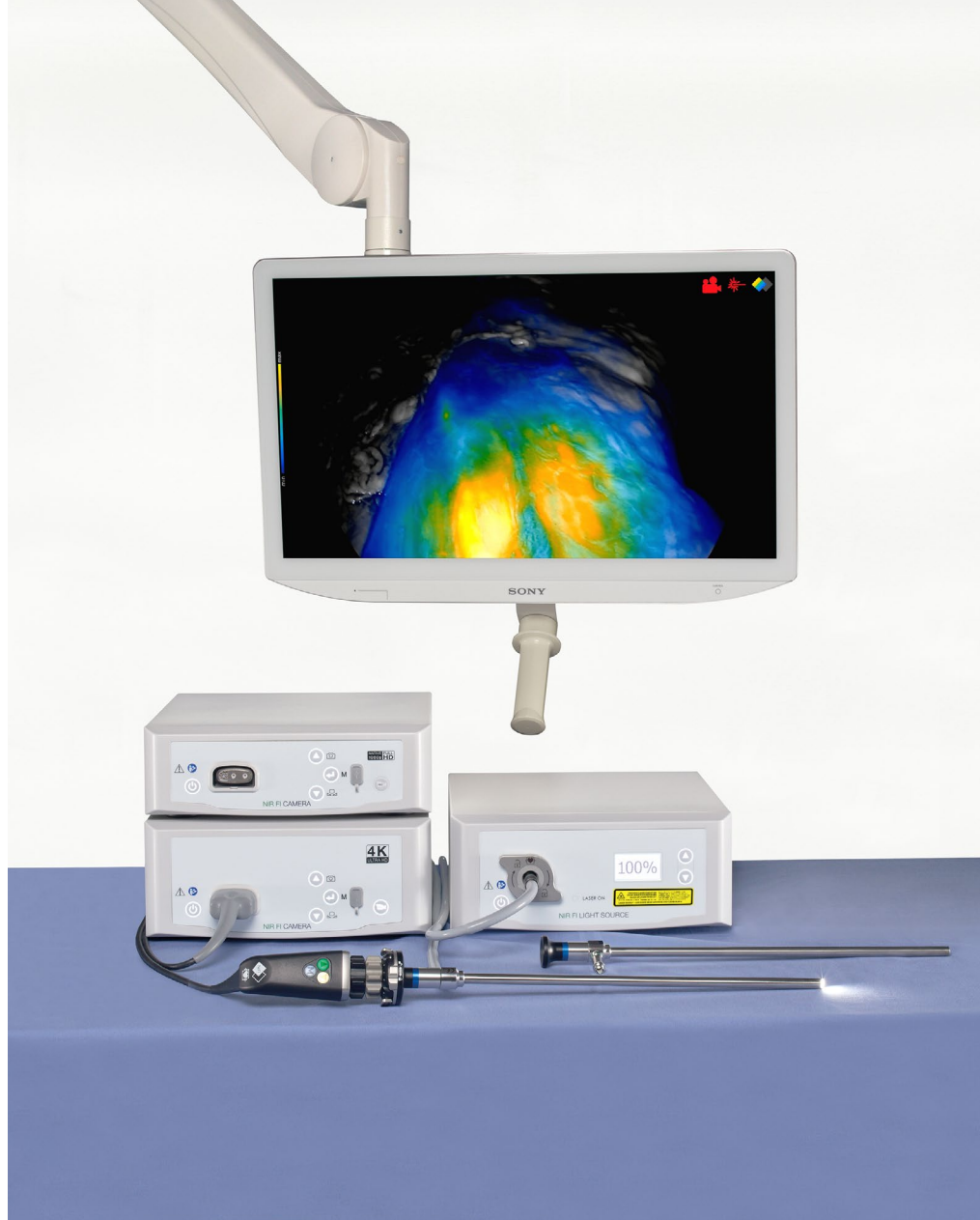
Centerpiece of a high-end 4K UHD camera system and for NIR FI applications with green, contrast and intensity mode. Large 4K UHD color space, BT2020. Automatic light control and activation of NIR laser of NIR FI light source. Highly economic by multi-connectivity with 4K UHD and Full HD camera heads for white light imaging.

### NIR FI CCU FULL HD

Camera control unit for NIR FI applications with green, contrast and intensity mode. Automatic light control and activation of NIR laser of NIR FI light source. Highly economic by multi-connectivity with different Full HD camera heads for white light imaging.

### NIR FI CAMERA HEAD FULL HD ZOOM

Sensitive in the visible and near-infrared spectrum to intraoperatively detect NIR fluorescence with indocyanine green. Powerful sensor with improved NIR sensitivity. Switch to NIR FI imaging modes by single press of a button.



### NIR FI LAPAROSCOPES

Especially designed laparoscopes for NIR FI applications. With AR coating for optimal NIR transmission. Sharp images to the edge in ultra-high resolution. The optimized objective reduces image artifacts and reflections; thus maximizes the contrast.

### NIR FI LIGHT SOURCE

LED light source with 805 nm NIR laser for optimal ICG excitation and with high color rendering index (CRI) for NIR FI applications. Fully automatic light control by NIR and FlexiVision 40 and 20 cameras through MIS-Bus interface.

### NIR FI LIGHT GUIDE

Specified equipment for NIR laser activation.

**Please note:**

Fluorescence imaging of all products only given in combination with SCHÖLLY NIR FI products.



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