# KARL STORZ Telescopes







# KARL STORZ HOPKINS® Telescopes: Quality – Value Preservation – Reliability



The KARL STORZ HOPKINS® rod lens system retains its impressive image quality with every new telescope. With over 75 years of experience, the name KARL STORZ is synonymous with high quality standards.

# The innovative technologies from KARL STORZ

- Quality improvements of the KARL STORZ telescopes through the continuous optimization of manufacturing processes and use of innovative materials.
- Optimized the optical system with state-ofthe-art manufacturing technologies.



Conventional KARL STORZ HOPKINS® telescopes can be used with all camera platforms, whether HD, 4K or future advancements to optimize workflow.

# Quality and service pay off:

The KARL STORZ repair-exchange program creates a closed service cycle: Replacement by original products preserves the long-term value of your investments at repair prices.

# **Application Images from KARL STORZ HOPKINS® Telescopes**

- Illumination and depth of field of an intraabdominal operative field while viewing tissue, e.g., in diagnostic laparoscopy.
- Sharpness of detail while performing anastomoses such as, for example, colonic anastomoses, esophageal anastomoses and gastric bypass anastomoses.



Prof. Dr. Martin Walz, Kliniken Essen Mitte, Germany



Prof. Dr. med. Ralf Rothmund, Lindenhofhospital, Berne, Switzerland



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# EndoCAMeleon<sup>®</sup>: One scope. Variable views.



The ENDOCAMELEON® provides surgeons with a great deal of flexibility and overcomes the limitations that are traditionally associated with rigid telescopes. The viewing direction of the ENDOCAMELEON® can be variably adjusted between 0° and 90°. This allows visualization of areas that are difficult to access with standard telescopes. Ergonomics and handling are the same as a conventional KARL STORZ HOPKINS® telescope.

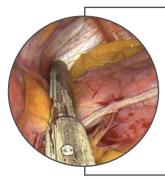
The ENDOCAMELEON® helps streamline your assets by allowing multiple angles in one scope with 4K. Due to its design you can change direction by simply turning the control wheel and it does not require additional intracorporeal space.

### **ENDOCAMELEON®**

- Particularly suitable for use in anatomically narrow working spaces
- Easy-to-use control wheel for setting the desired direction of view for the visualization of various anatomical structures, without changing the trocar
- Ideally suited for use with the IMAGE1 S™ 4U camera system

# **ENDOCAMELEON® Application Images**

# **General and Visceral Surgery**



# **Bariatric Surgery**

Sleeve gastrectomy

- Complete visualization of the gastroesophageal junction
- 45° 90°

Prof. Carus. Germany



# **Liver Segment Resection**

- Better visualization of the postero-superior segments of the liver
- 45°

Prof. Abu Hilal, Italy



# **Hernia Surgery**

TEP

- Complete visualization of the hernial sac
- 45°

Prof. Boni, Italy



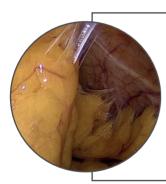
## **Colorectal Surgery**

Rectum resection

- Complete visualization of the anastomosis
- 30° 90°

Dr. Kanehira, Japan

# Gynecology

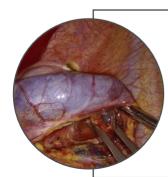


## Adnectomy

- Better visualization of various adhesions for easier adhesiolysis
- 90°

Dr. Wojdat, Germany





# **VATS Lobectomy**

- Better visualization during lymph node resection
- 45°

Dr. Kugler, Germany

# HOPKINS<sup>®</sup> Rubina<sup>™</sup> NIR/ICG Telescopes – IMAGE1 S<sup>™</sup> 4U Rubina<sup>™</sup>

The new Rubina NIR/ICG has been optimized for two light spectra, near infrared (NIR/ICG Mode) and white light (WL Mode). The focal points of the new KARL STORZ Rubina™ optics are aligned, eliminating the need for refocusing when switching between WL and NIR modes. Another distinct benefit is the edge-to-edge clarity and enhanced illumination of the surgical field.

Designed specifically for the Rubina 4U camera system, it provides three new imaging modalities: Overlay, Monochromatic, and Intensity Mapping.







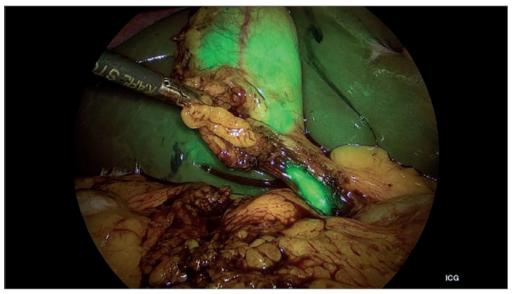
- Optimized illumination of the operative field
- No refocusing required when switching between the white light and NIR modes
- Portfolio includes a selection of viewing angles 0°, 30°, 45° and sizes 4 mm, 5 mm, and 10 mm.



Click here to view the application video for the new HOPKINS® Rubina™ NIR/ICG telescopes.

# Fluorescence Imaging with the New HOPKINS® Rubina™ NIR/ICG Telescopes

Visualization of the gallbladder and the bile ducts



Prof. Luigi Boni, IRCCS - Ca' Granda, Policlinico Hospital, University of Milan, Milan, Italy

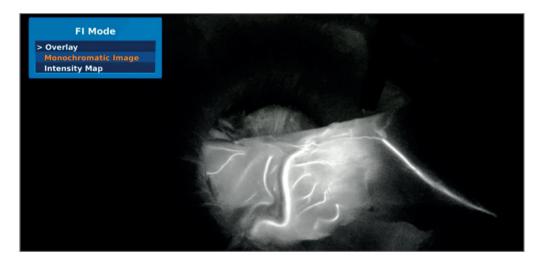


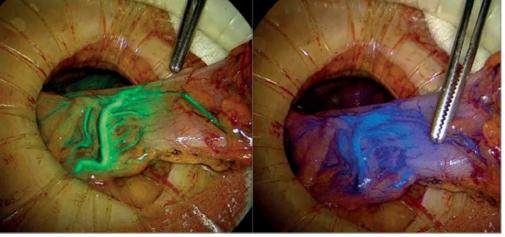
Prof. Salvador Morales Conde, Quirónsalud Sagrado Corazón Hospital, Seville, Spain

# Visualization of perfusion, e.g., colorectal anastomoses



Prof. Salvador Morales Conde, Quirónsalud Sagrado Corazón Hospital, Seville, Spain





Prof. Luigi Boni, IRCCS - Ca' Granda, Policlinico Hospital, University of Milan, Milan, Italy

# Visualization of the Lymphatic system



Michael Mueller, MD University Hospital Bern Bern, Switzerland

# White Light Telescopes:

# HOPKINS® Telescopes, diameter 3.3 mm, length 25 cm

26007AA **HOPKINS® Straight Forward Telescope 0°,** enlarged view, diameter 3.3 mm,

length 25 cm, autoclavable, fiber optic light transmission incorporated, color code: green

26007BA HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 3.3 mm,

length 25 cm, autoclavable, fiber optic light transmission incorporated, color code: red

# HOPKINS® Telescopes, diameter 5 mm, length 24 cm

26011AA HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 5 mm, length 24 cm,

autoclavable, fiber optic light transmission incorporated, color code: green

26011BA HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 5 mm, length 24 cm,

autoclavable, fiber optic light transmission incorporated, color code: red

# HOPKINS® Telescopes, diameter 5 mm, length 29 cm

26046AA HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 5 mm, length 29 cm,

autoclavable, fiber optic light transmission incorporated, color code: green

26046BA **HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, autoclavable,

fiber optic light transmission incorporated, color code: red

26046FA **HOPKINS® Telescope 45°,** enlarged view, diameter 5 mm, length 29 cm,

autoclavable, fiber optic light transmission incorporated, color code: black

# HOPKINS® Telescopes, diameter 5.5 mm, length 50 cm

26048ASA HOPKINS® Straight Forward Telescope 0°, diameter 5.5 mm, length 50 cm,

autoclavable, light connection offset by 180° and angled 45°

26048BSA **HOPKINS® Telescope 30°**, diameter 5.5 mm, length 50 cm,

autoclavable, post offset by 180° and angled 45°

26048FSA **HOPKINS® Telescope 45°,** diameter 5.5 mm, length 50 cm,

autoclavable, and angled 45°

# HOPKINS® Telescopes, diameter 10 mm, length 31 cm

26003AA **HOPKINS® Straight Forward Telescope 0°,** enlarged view, diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission incorporated, color code: green

26003BA HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 10 mm, length 31 cm,

autoclavable, fiber optic light transmission incorporated, color code: red

26003FA **HOPKINS® Telescope 45°,** enlarged view, diameter 10 mm, length 31 cm,

autoclavable, fiber optic light transmission incorporated, color code: black

# HOPKINS® Telescopes, diameter 10 mm, length 42 cm

Recommended for surgery on obese patients

26003AEA HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 10 mm, length 42 cm,

autoclavable, fiber optic light transmission incorporated, color code: green

26003BEA HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 10 mm, length 42 cm,

autoclavable, fiber optic light transmission incorporated, color code: red

26003FEA HOPKINS® Telescope 45°, enlarged view, diameter 10 mm, length 42 cm, autoclavable,

fiber optic light transmission incorporated, color code: black

## **ENDOCAMELEON®:**

26003EC **ENDOCAMELEON® HOPKINS® Telescope,** diameter 10 mm, length 31 cm, autoclavable, variable direction of view 0°-90°, with adjustment knob with fin for selecting the direction

of view, fiber optic light transmission incorporated, color code: gold

# **NIR/ICG Telescopes:**

26003ARA **HOPKINS® RUBINA™ 0°,** NIR/ICG, diameter 10 mm, straight-forward telescope 0°,

enlarged view, diameter 10 mm, length 31 cm, autoclavable, for indocyanine green

(ICG), fiber optic light transmission incorporated, color code: green

26003BRA HOPKINS® RUBINA™ 30°, NIR/ICG, diameter 10 mm, forward-oblique telescope 30°,

enlarged view, diameter 10 mm, length 31 cm, autoclavable, for indocyanine green

(ICG), fiber optic light transmission incorporated, color code: red

26003FRA **HOPKINS® RUBINA™ 45°,** NIR/ICG, diameter 10 mm, forward-oblique telescope 45°,

enlarged view, diameter 10 mm, length 31 cm, autoclavable, for indocyanine green

(ICG), fiber optic light transmission incorporated, color code: black

26003FREA Same, length 42 cm

26046ARA **HOPKINS® RUBINA™ 0°,** NIR/ICG, diameter 5 mm, straight-forward telescope 0°,

enlarged view, diameter 5 mm, length 29 cm, autoclavable, for indocyanine green

(ICG), fiber optic light transmission incorporated, color code: green

26046BRA HOPKINS® RUBINA™ 30°, NIR/ICG, diameter 5 mm, forward-oblique telescope 30°,

enlarged view, diameter 5 mm, length 29 cm, autoclavable, for indocyanine green

(ICG), fiber optic light transmission incorporated, color code: red

26046FRA HOPKINS® RUBINA™ 45°, NIR/ICG, diameter 5 mm, forward-oblique telescope 45°,

enlarged view, diameter 5 mm, length 29 cm, autoclavable, for indocyanine green

(ICG), fiber optic light transmission incorporated, color code: black

28164AC HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18

cm, autoclavable, for indocyanine green (ICG)

28164BC **HOPKINS® Straight Forward Telescope 30°,** enlarged view, diameter 4 mm, length

18 cm, autoclavable, for indocyanine green (ICG) fiber optic light transmission

incorporated, color code: red

28164FC HOPKINS® Forward-oblique Telescope 45°, enlarged view, diameter 4 mm, length

18 cm, autoclavable, for indocyanine green (ICG)

20916025AGA VITOM® II NIR/ICG Telescope 0°, with integrated illuminator and observation filter for

fluorescence diagnostics with ICG, HOPKINS® telescope, working distance 25-75 cm for white light, 20-30 cm for fluorescence applications, length 11 cm, autoclavable,

with fiber optic light transmission incorporated and condenser lenses,

color code: green

# IMAGE1 S™ 4U Rubina™ System Components

TC201US IMAGE1 S CONNECT® II, connect module, for use with up to 3 link modules,

 $\,$  4K technology, resolution 3840 x 2160 and 1920 x 1080, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-120 VAC/200-240 VAC,

50/60 Hz

TC304US IMAGE1 S™ 4U-LINK, link module, for use with IMAGE1 S™ 4U camera heads,

power supply 100-240 VAC, 50/60 Hz, for use with IMAGE1 S CONNECT® TC200 or

IMAGE1 S CONNECT® II TC201

TH121 IMAGE1 S™ 4U RUBINA™, OPAL1® NIR/ICG, S-Technologies available, progressive scan,

low-temperature sterilization, 2 freely programmable camera head buttons, for use with

IMAGE1 S™ 4U-LINK

TL400 Cold Light Fountain POWER LED RUBINA™, with high-performance light unit for

perfusion assessment and standard endoscopic diagnosis, including an LED and a KARL STORZ light cable connection, power supply 100-125/220-240 VAC, 50/60 Hz

including:
Mains Cord

Patch Cable

**Sync Connecting Cable** 

UF101 One-Pedal Footswitch, one-stage

TM340 32" 4K Monitor, screen resolution 3840 x 2150, image format 16:9, inputs: 12G-SDI, DP

1.2, HDMI, DVI-D

## Sterilization trays

39301BS Sterilization Tray for Cleaning and Storage of two rigid endoscopes, external

dimensions (w x d x h): 17.56 x 3.48 x 1.56 mm, for rigid endoscopes up to diameter 5 mm

and working length 35 cm

39301CS Sterilization Tray for Cleaning and Storage of two rigid endoscopes, external

dimensions (w x d x h): 20 x 3 x 1.3 mm, for rigid endoscopes up to diameter 10 mm and

working length 31 cm

39301DS Sterilization Tray for Cleaning and Storage of two rigid endoscopes, external

dimensions (w x d x h): 26 x 3.9 x 2.75 mm, for rigid endoscopes up to diameter 5.5 mm

and working length 53 cm

39301C1S Sterilization Tray for Cleaning and Storage of one rigid endoscope with lighting cable,

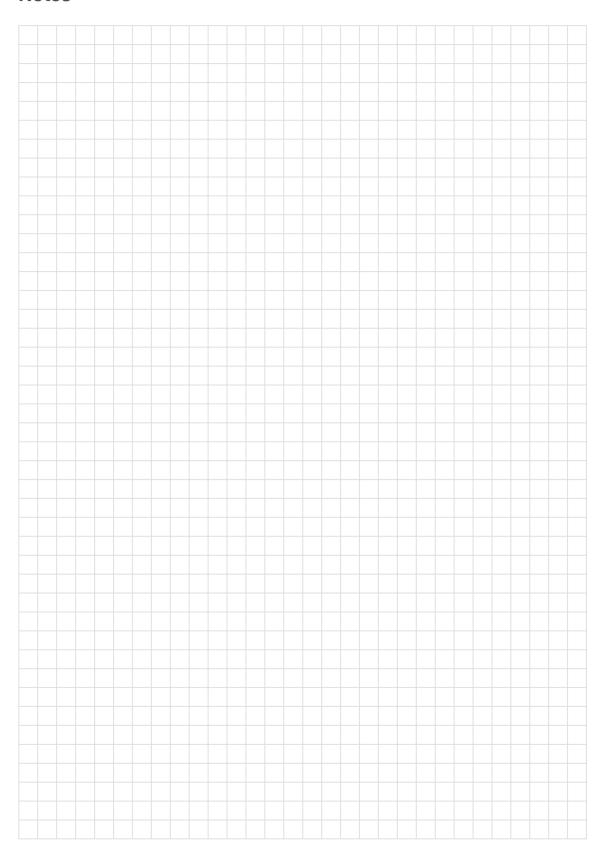
external dimensions (w x d x h): 20 x 3 x 1.25 mm, for rigid endoscopes up to diameter

10 mm and working length 31 cm

# **Light Cables**

Light cable diameter	Endoscope diameter		NIR/ICG compatibility
3-3.5 mm	3-6.5 mm	495NL Fiber Optic Light Cable, diameter 3.5 mm, length 180 cm	_
		495NA Fiber Optic Light Cable, diameter 3.5 mm, length 230 cm	_
		495NAC Fiber Optic Light Cable, extremely heat- resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm	<b>✓</b>
		495ND <b>Fiber Optic Light Cable</b> , diameter 3.5 mm, length 300 cm	_
4.8-5 mm	10-11 mm	495NB Fiber Optic Light Cable, diameter 4.8 mm, length 180 cm	-
		495NCS <b>Fiber Optic Light Cable</b> , extremely heat- resistant, enhanced light transmission, diameter 4.8 mm, length 250 cm	-
		495NCSC <b>Fiber Optic Light Cable</b> , extremely heat-resistant, with safety lock, enhanced light transmission, diameter 4.8 mm, length 250 cm	/
		495NE Fiber Optic Light Cable, diameter 4.8 mm, length 300 cm	-
		495TIP <b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 300 cm	-

# Notes



It is recommended to check the suitability of the product for the intended procedure prior to use.

Please note that the described products in this medium may not be available yet in all countries due to different regulatory requirements.



# Shaping the Future of Endoscopy with you

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