

अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स) कल्यानी All India Institute of Medical Sciences (AIIMS) Kalyani (स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार के तत्वावधान में एक सांविधिकनिकाय) (A Statutory Body under the Aegis of Ministry of Health and Family Welfare, GOI) राष्ट्रीय राजमार्ग – 34, बसन्तपुर, सागूना, कल्याणी, ज़िला – नदिया, पश्चिम बंगाल - 741245 NH-34 Connector, Basantapur, Saguna, Kalyani, District Nadia, West Bengal 741245

WEB CHALLENGE

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To be uploaded in website:-

#### Memo No. P-13020/1/21-(GeM Gen Sur)/267/366

Date: 11.06.2021

<u>Sub</u>: Procurement of **Stryker 1688 AIM-4K Laparoscopy with ICG and hand instrument set with SPY-PHY Machine set** for the department of General Surgery, AIIMS, Kalyani on Proprietary basis.

#### **Inviting Comments thereon.**

The department of General Surgery, AIIMS, Kalyani has requested for procurement of **Stryker 1688 AIM-4K Laparoscopy with ICG and hand instrument set with SPY-PHY Machine set On** Proprietary basis through **M/s. Stryker India Pvt. Ltd.** 

The notice is being uploaded for general information of prospective Manufacturer/Authorized Distributor/Dealer to submit their objection/proposal/comments, if any on proprietorship of the item.

In case the product of any Manufacturer/Authorized Distributor/Dealer conforms to the enclosed specifications, they may submit their proposal for the supply of the same along with the brochures, point by point compliance of the enclosed specifications along with all documentary evidence. One quotation of the product may also be submitted.

The objection/proposal/comments, if any should be sent through email to <u>procurement@aiimskalyani.edu.in</u> so as to reach on or before **dated 27/06/2021**. Failing which it will be presumed that no other firm is interested to offer comments/protest/object and case will be decided on its merits.

#### **Enclosures:**

- 1.) Proprietary Article Certificate from M/S. Stryker India Pyt. Ltd.
- 2.) Proprietary Article Certificate from Competent Authority, AIIMS, Kalyani
- 3.) Technical Brochure of the Instruments

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अखिल भारतीय आयुर्विज्ञान संस्थान (एम्स) कल्यानी All India Institute of Medical Sciences (AIIMS) Kalyani (स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार के तत्वावधान में एक सांविधिकनिकाय) (A Statutory Body under the Aegis of Ministry of Health and Family Welfare, GOI) राष्ट्रीय राजमार्ग – 34, बसन्तपुर, सागूना, कल्याणी, ज़िला – नदिया, पश्चिम बंगाल - 741245 NH-34 Connector, Basantapur, Saguna, Kalyani, District Nadia, West Bengal 741245

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#### Copy To:

- 1. Indenting Officer
- 2. PS to ED
- 3. IT Cell

: For kind information please: For kind information please: For kind information please

Dy. FIC/FIC Procurement. AIIMS, Kalyani

-126 ASO, Procurem AIIMS, Kalyani

stryker

Vatika Business Park 10th Floor, Block- Two, Sect-49, Sohna Road Gurgaon- 122002, Harvana, India. t: +91-124-4850500, 600 f: +91-124-4850666

#### PROPRIETARY CERTIFICATE

We are hereby confirming that below mentioned product has an IRIS (Infrared Illumination System) feature and is the proprietary product of Stryker Corporation, USA. Manufacturing location details are given below:

Cat No.	Description	Manufacturing Location/ Distributed By	
0220230300	L11 light source	Stryker Endoscopy, San Jose, USA	

Stryker India is 100% subsidiary of Stryker Corporation, USA

#### Signed and seal on behalf of Manufacturer



Digitally signed by Deepak Sharma Date: 2020.07.02

Stryker India Pvt. Ltd. Regd. Office: C-5, Safdarjung Development Area, Commercial Complex, New Delhi -110016. www.stryker.com CIN : U51505DL1999PTC100985



# NOV/DAQ

Novadaq Technologies ULC 8329 Eastlake Drive, Unit 101 Burnaby, British Columbia, Canada V5A 4W2 T 604.232.9861 F 604.232.9841

February 20, 2020

#### PROPRIETARY CERTIFICATE

Novadaq Technologies ULC, located at 8329 Eastlake Drive, Unit 101, Burnaby, British Columbia, V5A 4W2, Canada, certifies that the products mentioned below are proprietary products of Novadaq Technologies ULC, a part of Stryker Endoscopy.

#### SPY Portable Handheld Imaging (SPY-PHI) System

Item No. Description		
PC9001 Video Processor/Illuminator (VPI)		
НН9030	SPY-PHI Handheld Imager	
1-0011973	SPY-PHI Universal Box	

#### **PINPOINT Endoscopic Fluorescence Imaging System**

Item No. Description			
PC9001	Video Processor/Illuminator (VPI)		
PC9002	PINPOINT Camera		
PC9004	PINPOINT Light Guide Cable		
SC9104	Laparoscopes, standard length, 10 mm, 0 deg		
SC9134	Laparoscopes, standard length, 10 mm, 30 deg		
SC9144	Laparoscopes, standard length, 10 mm, 45 deg		
SC9504	Laparoscopes, standard length, 5 mm, 0 deg		
SC9534	Laparoscopes, standard length, 5 mm, 30 deg		
SC9544	Laparoscopes, standard length, 5 mm, 45 deg		
PC9017	No-Wrap Reprocessing Tray for two (2) Laparoscopes and one (1)		
	Light Guide Cable		
PC9018	No-Wrap Reprocessing Tray for one (1) Camera Head		
CAB1090IN	Power Cable		
1-0011975	PINPOINT International Box		

#### SPY Fluorescence Imaging System

Item No. Description		
ND8010 Novadrape 8000 (Box of 10)		
SP3055	SPY Fluorescence Imaging System 220V	
013-00220-025 SPY Fluorescence Imaging System, Regional Box, India		



# ΝΟΥΛΟΛΩ

Novadaq Technologies ULC 8329 Eastlake Drive, Unit 101 Burnaby, British Columbia, Canada V5A 4W2 T 604.232.9861 F 604.232.9841

The following are products distributed by Novadaq Technologies ULC, a part of Stryker Endoscopy. These products are designed to be used specifically for Novadaq's SPY-PHI System and PINPOINT System.

Item No.	Description		
HH2020 SPY-PHI Drapes Only (Pack of 20)			
HH1001	SPY-PHI Articulating Arm, Main Arm	SPY-PHI Articulating Arm, Main Arm	
HH1002	SPY-PHI Articulating Arm, Table Clamp	SPY-PHI Articulating Arm, Table Clamp	
HH1003	SPY-PHI Articulating Arm, Imaging Head Holder		

#### SPY Portable Handheld Imaging (SPY-PHI) System - accessories

#### PINPOINT Endoscopic Fluorescence Imaging System - accessories

PC9017	No-Wrap Reprocessing Tray for two (2) Laparoscopes and one (1) Light Guide Cable
PC9018	No-Wrap Reprocessing Tray for one (1) Camera Head

ruary 20, 2020

Karena Dela Cruz Senior International Regulatory Affairs Specialist



#### **AIIMS, KALYANI**

#### **Proprietary Article Certificate** Valid for the Current Financial Year

File N	o. and Date Reference :		8			
1	Description of article			Stryker 1688 AIM-4K Laparoscopy with ICG and hand instrument set with SPY-PHI Machine set		
2	Forecast of quantity /annual requirement one					
3	Approximate estimated v	alue for above quantity		One crore sixty	five lac only	*
4	Maker's name and addres	S		Stryker India Pv	t Ltd	
5	Name(s) of authorized de	alers/ stockists	17	NA	а ;	
6	Note- Tick to retain only o	nase on PAC basis and certify that one out of (b), C-1) or (c-2) which PAC certificate will be invalid.		le and cross out c	others. Please	e do confirm (a) by
6 (a)	This is the only firm who i AND	s manufacturing / stocking this it	em.			Yes
6 (b)	A Similar article is not manufactured / sold by any other firm, which could be used in lieu OR					Yes
6 (c- 1)	No other make/brand will be suitable for following tangible reasons (like OEM/ Warranty, spares.) : NA OR					NA
6 (c)	NA No other make/brand will be suitable for following intangible reasons (if PAC was also given in the (c) last procurement cycle, please also bring out efforts made since then to locate more sources) : OR 				NA	
7	Reference of concurrence of finance wing to the proposal :					
Histor	ry of PAC Purchase of this it	em for past three years may be g	iven below :			
Name	of the Supplier					
Ord	Quantity Ordered Basic Rate on Order (Rs.)		verse Performance Reported if Any			
Tata M Mum	Memorial Hospital, bai	1	Not available		Not available	
	atarakam Indo-American r hospital and research	1	Not available		NO	
AIIMS	AIIMS ,New Delhi 12 (Previous Model of 1588) No		Not available	e Not available		ble
		I		1	r 1	11 11.

Signature of Approving Authority. 

Anindya Halder. Signature of the Indenting Officer Aksistant Professor. General Eurogery. Alims-Kalyani, 31/5/2021 Date 3 6 2

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### 1688 4K Platform

#### **GENERAL OVERVIEW**

#### 1688 AIM 4K Platform:

The 1688 AIM 4K Platform features several enhancements, such as brilliant 4K resolution and fluorescence, auto-light technology, better ergonomics and seamless standardization. Approved for use in a variety of specialties, including arthroscopy, laparoscopy, urology, gynecology, colorectal and ENT, the platform's vivid 4K display offers consistently bright, crystal-clear images for improved surgical visualization. The advanced system's L11 light source features Stryker's proprietary auto-light technology, which automatically corrects poor lighting in posterior compartments and self-adjusts based on anatomy.

#### Features:

- **4K Fluorescence**: The 1688 AIM Platform is a native 4K system that includes the capability to perform real-time endoscopic visualization and near-infrared fluorescence imaging with activation control of SPY Modes from the camera head, including Overlay, ENV and Contrast. The 1688 AIM Platform is indicated for use during minimally invasive surgery using native 4K endoscope visible light as well as visual assessment of vessels, blood flow and related tissue perfusion, and at least one of the major extra-hepatic bile ducts (cystic duct, common bile duct and common hepatic duct), using near infrared imaging.
- SPY Overlay: Spy Overlay mode is best in class with an improved white-light image integrated with fluorescence in real time, no toggling necessary. This modality processes two white light images and inserts infrared in between to achieve an overlay on the white light image. Our color overlay is 2X faster than the average image; by collecting 120 frames per second versus the standard 60 frames per second.
- SPY ENV: Endoscopic near Infrared Fluorescent Visualization or ENV mode displays the image in a greyscale with green overlay. This fluorescence modality provides an enhanced visual assessment of blood flow, tissue perfusion, and biliary ducts when activated. Similar to 1588 ENV, but with improvements made to the gain, which makes this a great transition mode to use for any customers, familiar with 1588. With the 1688, surgeons are able to operate in ENV mode due to the improvements made.
- SPY Contrast: SPY Contrast is an incredibly detailed, high-contrast visualization of fluorescence. The image is displayed in black and white to provide a true "north" of perfusion.
- IRIS: The Stryker 1688 AIM 4K Platform includes an Infrared Illumination System (IRIS), designed to trans-illuminate and visualize the ureters during laparoscopic surgery.

#### Other features of the platform:

- **9 cross-specialty settings:** As with our previous generations, the 1688 AIM 4K platform is designed to provide outstanding white light visualization across all your minimally invasive surgeons within the hospital so that you can standardize to a single camera vendor for every specialty.
- CMOS camera technology
- **Programmable camera head buttons** allows further control from the sterile field and customization to improve efficiency.
- **Auto Light:** Auto-light technology maintains consistent light using a camera algorithm, which determines optimal lighting levels. The L11 rapidly adjusts the light output accordingly.
- White Ring Technology: The L11 Light Source has White Ring Technology to ensure the light cable is securely plugged in. There is an illuminated ring around the cable insertion point to indicate cable connection, safelight connection, and L11 power status.
- **Safelight Technology:** Designed to reduce the risk of OR fires, Stryker's proprietary Safelight Technology automatically shuts off the Stryker light source if the fibreoptic cable becomes disengaged from the scope.
- **4K Display:** Our latest display has a wider and more accurate colour gamut. It optimizes the visualization of the 1688 AIM 4K Platform by maximizing colour reproduction with 4x the resolution of a 1080p image

#### High-definition medical video recorder

- It has provision to record the images and video sequences in OT.
- Should be compliant to Medical standards
- It should support wide range of recording resolutions
   1920 x 1080 (30Hz / 29.97Hz) to 640 x 480: Undiluted recording resolution
   Supported Input resolution
- It should have multiple HD & SD inputs/outputs
- Should have still image recording format of jpeg and video format of MPEG-4
- Display should be at least 3.5" LCD
- It should support recordable devices like USB Flash Drive, USB Hard Drive, Internal hard drive of 500 GB
- US FDA approved device

#### **TECHNICAL SPECS**

	1/2.8" Progressive Scan CMOS	
Imaging System	Ultra-High Definition	
	Horizontal: 135.00 kHz	
Scanning System	Vertical: 60.00 Hz	
Video Outpute	Two HDMI 2.0 outputs	
Video Outputs	Formats: 1080p (HDTV), 4K UHD (3840 x 2160)	
	Endoscope eyepiece used with C-mount coupler	
Mounting	C-mount camera head used with C-mount scopes	
	(C-mount coupler/scope thread: 1-32" UN 2A)	
Auto Shutter Range	1/60 – 1/22,478 second	
	Temperature: 10–30 °C	
Operating Conditions	Relative Humidity: 25–75%	
Transport and Storage	Temperature: -18–60 °C	
Conditions	Relative Humidity: 15–90%	
Input Electrical Ratings	100–240V~ 50/60Hz 1.2A	
Device Weight	12.0 lb (5.44 kg) Camera Console	
Device Weight	1.0 lb (0.5 kg) Camera Head (approximate weight)	
	Camera Console: 13.0" w × 4.458" h × 16.627" d	
Dimensions	(33.02 cm w × 11.32 cm h × 42.23 cm d)	
	Camera Head Cable: 10 ft (3.05 m) sealed cable	
	Class I Equipment	
	Continuous Operation	
Classification	Type BF Applied Part	
	Ingress Protection, IPX7—Protected against the effects of temporary	
	immersion in water (1688 Camera Heads)	

#### L11 Light Source with Advanced Imaging Modality

The L11 AIM Light Source and Safelight Cable are indicated for use to provide real-time endoscopic visible and near-infrared fluorescence imaging. The L11 AIM Light Source and Safelight Cable enable surgeons to perform minimally invasive surgery using standard endoscope visual light as

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well as visual assessment of vessels, blood flow and related tissue perfusion, and at least one of the major extra-hepatic bile ducts (cystic duct, common bile duct and common hepatic duct), using near-infrared imaging. The L11 AIM Light Source is also intended to trans illuminate the ureter during open or Laparoscopic surgical procedures.

Electrical:			
Power Connection	100-240 V, 3.2 – 1.3 A		
Frequency	50/60 Hz		
Mains Fuse	T 5.0AH 250V		
Dimensions:			
Width	12.5" (31.8 cm) width		
Height	4.75" (12.1 cm) height		
Depth	16.8" (42.7 cm) depth		
Mass	16.0 lbs. (7.3 kg)		
Light Engine			
Туре	Red LED, Green LED, Blue LED, 808 nm Laser, 830 nm Laser		
Operating Conditions			
Temperature	10-30 Degree Celcius		
Humidity	25-75 %		
Laser Specifications			
Laser	Emitted wavelength in ENV mode: 808 nm (Class 1M laser) Emitted wavelength in IRIS mode: 830 nm (Class 1 laser) Maximum output of laser radiation: Below Class 1M limit		
Classification and Approvals			
	Class I Equipment Continuous Operation Type CF Applied Part Ingress Protection, IPX0—Ordinary Equipment Class 1M Laser Product Laser product classified per IEC 60825-1:2014, Safety of laser products – Part 1: Equipment classification and requirements This product complies with IEC 60825-1:2014 This product complies with 21 CFR, Subchapter J, Parts 1040.10 and 1040.11, except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001		

#### **TECHNICAL SPECS**

#### 32" 4k Surgical Display

Our 32" 4K Surgical Display is designed to increase the visual experience in the operating room than with previous generations.

• Optimizes\_ the visualization of the Advanced Imaging Modalities.

Spillen

- •
- 4X the resolution of a 1080p image 4K pixel density offers a bright colorful viewing experience On-screen display with customized surgeon profiles •
- •

Relative Humidity Item		Description	
LCD PANEL	Description	31.1" (812 mm) Diagonal	
	Native Resolution	4096 (H) dots x 2160 (V) lines	
	Display Colors	1,073,741,824 colors	
	Pixel Pitch	0.1704 mm x 0.1704 mm	
	Response time	Rise time: 11 ms Fall time: 9 ms	
	Viewing angle	horizontal/vertical: 178°	
Brightness and	Brightness	525 cd/m2	
Contrast	Contrast	1500 : 1	
Input & Output	Input	Output	
	1 x DVI 1 x HDMI (HDMI 1.4) 1 x HDMI 4K (HDMI 2.0) 1 x RS-232 (SPI router control) 1 x SDC device control interface (USB)	2 x USB (5 V, 1 A power only; not used for data transfer)	
Temperature	Operating	50° – 104°F (10° – 40°C)	
	Transport & Storage	0° – 140°F (-18° – 60°C)	
Relative Humidity	Operating	25-75%	
	Transport & Storage	15-90%	
Electrical	Power Adaptor	Emitted wavelength in ENV mode: 808 nm (Class 1M laser) Emitted wavelength in IRIS mode: 830 nm (Class 1 laser) Maximum output of laser radiation: Below Class 1M limit	

3/6/201

		20-120 Watts
	Power Consumption	х.
Weight with Cabl	e Cover	23.1 lb (10.5 kg)
(approximate)		
Unit Dimensions (W x H x D)		756.7 x 453 x 77.2 mm 29.7 x 17.8 x 3 in
VESA Mounting Ir	nterface Dimensions	VESA 100 x 100 mm VESA 200 x 100 mm
Accessory Mount Dimensions	ing Interface	75 x 75 mm (x2)
Current/Voltage Rating	110V +/- 10V power outlets	Select a power supply cord that is UL Listed and C.S.A Certified, type SJT or SVT, 3 – conductor, 18 AWG, terminated in a molded on hospital grade plug cap rated 110V +/- 10V, 15A, with a minimum length of six feet.
	220V +/- 20V power outlets	Select a power supply cord that is internationally harmonized and marked " <har>", 3 – conductor, 0.75 mm^2 minimum wire, rated 220 V +/- 20 V, 10 A with a PVC insulated jacket. The cord must have a molded on plug cap rated 220 V +/-20 V, 10 A. The cord and plug cap must be suitable for medical use.</har>

#### AIM Telescopes

officer

- 5.mm 0 & 30 Degree , 10mm 0 & 30 Degree AIM laparoscopes for Endoscopic Near Infrared (NIR) visualization.
- lens technology to enable visualization of fluorescent and near-infrared wavelengths
- Aspherical Lens Technology for minimized optical distortion
- Improved light transmission and edge brightness
- Laser welded enclosures for increased quality and durability

Insufflators 45L Qty-1

- Min 45 liter of high flow & having LCD Display measurement
- Soft approach pressure control for safe recovery of abdominal pressure
- Should have four mode & visual and audible alarms with min 0.1 L flow rate
- Internal leakage detection capability
- Integrated Gas heating
- Having internal venting system for safety
- Should have video on screen display & Touch screen facility
- Unit should include heated tubing, hose & yoke
- With dedicated -Pediatric & Bariatric Modes

#### SPY Fluorescence Imaging technology for open procedure

#### 1. Video Processor and Illuminator (VPI)

The VPI shall be able to provide the VIS (visible) and NIR (near-infrared) illumination to the surgical endoscope via a flexible light guide simultaneously.

The VIS light source shall be consisted of light emitting diode array.

The NIR light source shall be consisted of NIR laser diode array.

The VPI shall be able to generate simultaneous real-time HD video color and ICG fluorescence images as an overlay in the same image.

NIR light source shall be triggered by the button on the camera.

It shall have an indicator in the monitor when NIR light source is on.

Video output signals: 2 HD-SDI, 1 DVI

It shall able to convert the video format between HD-SDI and 3G-SDI.

Output HD format: 1080i59.94, 1080p59.94

Picture elements: 1920 x 1080

Service port I/O: RS-232 (via D-subminiature 9-pin connector)

The device shall have four buttons at the front panel for quick operation and setting purpose:

All ror

Power on/off

Illumination button

White balance button

Menu setting

The device shall have three indicators at the front panel to indicate the following conditions:

Power indicator

Illumination indicator

Laser on indicator

An indication icon shall be shown on the monitor to indicate whether the white balance is completed.

The device shall be able to generate and display 4 different modes of images on the monitor simultaneously.

White Light mode - displays the image in white light

Black and White Fluorescence mode - displays the NIR Fluorescence image in greyscale and displays others in black.

NIR and VIS overlay mode - displays the NIR fluorescence which is superimposed in pseudo-color (green) on a white light image

Color-segmented Fluorescence mode - displays the NIR fluorescence intensities in a color spectrum that is superimposed on a white light image

Indication icons shall be shown on the monitor to differentiate the 4 modes of display. Operating temperature: +10°C to +30°C

Operating Relative humidity: 10 to 85%

Storage/Transport conditions:

Temperature range (storage): -10°C to +55°C

Humidity range (storage): 10 to 85%

Humidity range (transport): 5 to 95%

Dimensions: 400mm x 200mm x 465 mm (WxHxD)

Weight: 13kg

Power consumption: 300 VA

**Electrical safety:** 

According to IEC 60601-1

Type of protection against electric shocks: Class I

Degree of protection against electric shocks: CF-type

Laser class: 3R (According to IEC/EN 60825-1, Complies with 21CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007) Radio frequency emission: Group 1, Class A (According to CISPR 11/EN 55011) Harmonic emissions: Class A (According to IEC/EN 61000-3-2) Apertures for NIR radiation emission: Endoscope tip and light guide cable tip

Accessible NIR radiation (at the tip of the endoscope)

Wavelength: 805nm

Repetition rate: 20 pulse/ sec

Energy output(maximum): 2 mJ/pulse

Beam divergence: 75°+- 5°

Sieland

Embedded Laser Source Classification: Class 4

#### 2. Full HD Portable Handheld Imager

Image Sensors: CMOS HD sensor assembly

Resolution: 1080P

Frame rate: 60fps

Working distance: 10 - 40cm

Aspect ratio: 16:9 which can display captured images in widescreen monitor without any signal conversion. This prevents a loss of image quality caused by image ovalization.

Dimensions: 88mm x 136mm x 122mm (WxHxL)

Weight: 495g

Cable length: 3m

Operating temperature: +10 to +30°C

Atmospheric pressure: 70 kPa to 103 kPa

Storage/Transport conditions:

Relative humidity: 10 to 85%RH

Temperature: -10 to +55°C

The imager has twin anamorphic illumination ports to visually define FOV extent for the operator and ensure adequate illumination of anatomy irrespective of lighting conditions.

The imager is immune to ambient room lighting, which means room lights can be turned on during imaging.

The imager connects to the same VPI as the endoscopic camera to achieve MIS & Open fluorescence surgery in the same system.

The imager has a proprietary optional bed-mount arm to avoid fatigue of operator for long-term procedures.

The imager has a proprietary sterile drape so that it can be placed in the surgical field without contamination.

The imager shall have five buttons for quick functions and setting purpose

Two focus buttons for focusing the image

A button to toggle between VIS and NIR

A button to toggle between different modes of NIR

A button to call for menu functions

Basic functions including turning camera light on and off, white balance, screen capture and recording can be done using the buttons on the camera

The imager is not to be sterilized with any methods.

Optimized for simultaneous VIS (visible) imaging and fluorescent imaging in the NIR spectral range.

#### **Aluminum Sterilization tray**

Tray for Camera & Light guide

2.20.1.1. Dimensions: 28cm x 10cm x 46cm (WxHxL)

A16/2021

Tray for telescopes

2.20.2.1. Dimensions: 28cm x 10cm x 59.7cm (WxHxL)

#### **Articulating Arm**

- This arm is used to hold and position the camera head as per the surgical requirements
- This product has three components: the table clamp, the main arm and the imaging head holder
- The table clamp Provides an attachment point to the operating table side rail. Accepts and holds the column of the main arm in position and allows for full range of rotation.
- The Main Arm provides three-point positioning of the imaging head into the surgical field
- The imaging head holder Connects to the distal end of the main arm to provide an attachment point for the imaging head
- The arm is made up of metal with and has the ability to be sterilized for reuse through autoclaving

#### 7.0 Trolley

- Trolley should be capable to mount above-mentioned system
- Should have space to keep CO2 cylinder
- Should have movable arm to mount monitor

#### ALL ITEMS SHOULD BE US FDA CERTIFIED & EUROPEAN CE CERTIFIED FROM NOTIFIED BODY WARRANTY FOR 5 YEARS

# The first to fluorescence in 4K

BENYKON

1688 pt

See beyond



1688

# Introducing 1688 AIM 4K Platform

# The first to fluorescence in 4K

See beyond

# General Surgery Challenges



- Bile duct injuries present a real danger to patient outcomes
- Fluorescence requires separate camera systems
- Consistent lighting throughout the entirety of a case

## General Surgery Solutions



BDI rates reduced by 45% with use of fluorescence
4K resolution and SPY fluorescence, all in one system
Consistent lighting throughout your procedure with automatic light adjustment







- Anastomotic leak is a dreaded complication of a Roux-en-Y gastric bypass.
- The leak incidence after a laparoscopic Roux-en-Y gastric bypass is up to 4.4%
- Fluorescence typically requires a separate camera system





- Assess perfusion after anastomosis with SPY fluorescence in 4K resolution
- Assess fluorescence of ICG in the blood and assess blood flow to the staple line post anastomosis.
- **4K resolution** and **SPY fluorescence,** all in one system

# **Colorectal** Challenges



- Rates of anastomotic leak in laparoscopic colorectal surgery range from 2.5-12%
- Ureteral injury accounted for 0.3% to 1.8% in lower pelvic procedures
- Fluorescence typicallyrequires a separate camera system







- Assess perfusion with SPY fluorescence in 4K resolution
- IRIS ureteral stents are designed to save time and reduce risk of ureteral injury
- 4K resolution and SPY fluorescence, all in one system





- Identification of the ureters in lower pelvic cases
- Smokey surgical view due to the use of cauterizing tissue
- Unique anatomy causes inconsistencies in lighting and inaccurate color reproduction





- IRIS ureteral stents may save time and are designed to reduce risk of ureteral injury
- Improved deep pelvic lighting with auto-light
- Improved color reproduction for distinguishing anatomical variances with native 4k for every specialty



# See your patients in a whole new light

### Featuring:

- Clearer visualization with 4K resolution in camera and scope\*
- Bright auto-light for consistent lighting throughout procedure
- Brilliant 4K SPY fluorescence imaging

\* As compared to the 1588 AIM Platform

# See beyond







# Why use fluorescence?

Blood flow is one of the most important factors in tissue healing. Fluorescence imaging with ICG means seeing beyond the naked eye, allowing the surgeon to visualize tissue perfusion and aim for the best patient outcomes possible. ICG has been proven in over 235 clinical articles to aid in the visualization of blood flow, potentially mitigating the risk of complications caused by poor perfusion. ICG is also utilized to identify biliary anatomy, providing confirmation and confidence in surgical decision making.

# Clinical applications of fluorescence



Clearer anatomy identification



Perfusion assessment



SLN Mapping





# Fluorescence ICG can see what the eye cannot

### **Brilliance in SPY**

See what's always been there, but from a new perspective. The Stryker 1688 AIM 4K Platform allows for real-time imaging of anatomy during surgery, with automated light control for a seamless workflow across multiple specialties. The Advanced Imaging Modalities allow surgeons to see beyond the pixels so they can provide optimal care for their patients.



SPY Overlay

4K fluorescence overlaid on a white light image



#### SPY ENV

4K fluorescence displayed in grayscale and green



#### **SPY** Contrast

High contrast visualization of 4K fluorescence in black and white



#### IRIS

Lighted ureteral stents designed to mitigate the risk of ureteral injury



Automatic light adjustment to maintain consistent lighting throughout procedure

