



KANGDUO®SR2000

Redefining Robotic Surgical System

Distribution in Poland:

BERYL^{med}
For Medical Professionals

Product Component

KANGDUO® SR2000 is composed of the Surgeon Console (One console comes standard, the second one is optional, the Patient Cart, the Vision Cart (endoscopic camera system, Instruments and Accessories.



System	Picture	Product Component	Item Code
SR2000 Robotic Surgical System SR2000		Patient Cart	PC2000
		Surgeon Console	SC2000
		Vision Cart (Endoscopic Camera System)	VC2000
		Instruments and Accessories	Please refer to the 《Sagebot Kangduo Surgical Robot Instruments and Accessories Catalog_Version 2024Q4》 for detailed parameters of the device.

Surgeon Console



The surgeon sits in front of the surgeon console and controls all actions of the instrument and endoscope by using two hand controls and a set of footpedals. The surgeon wears 3D glasses to observe the endoscopic image on the main display screen. The 3D display supports 4K high definition and can provide the information and icons of the patient's surgical location and instruments.

Multimodal Image Navigation

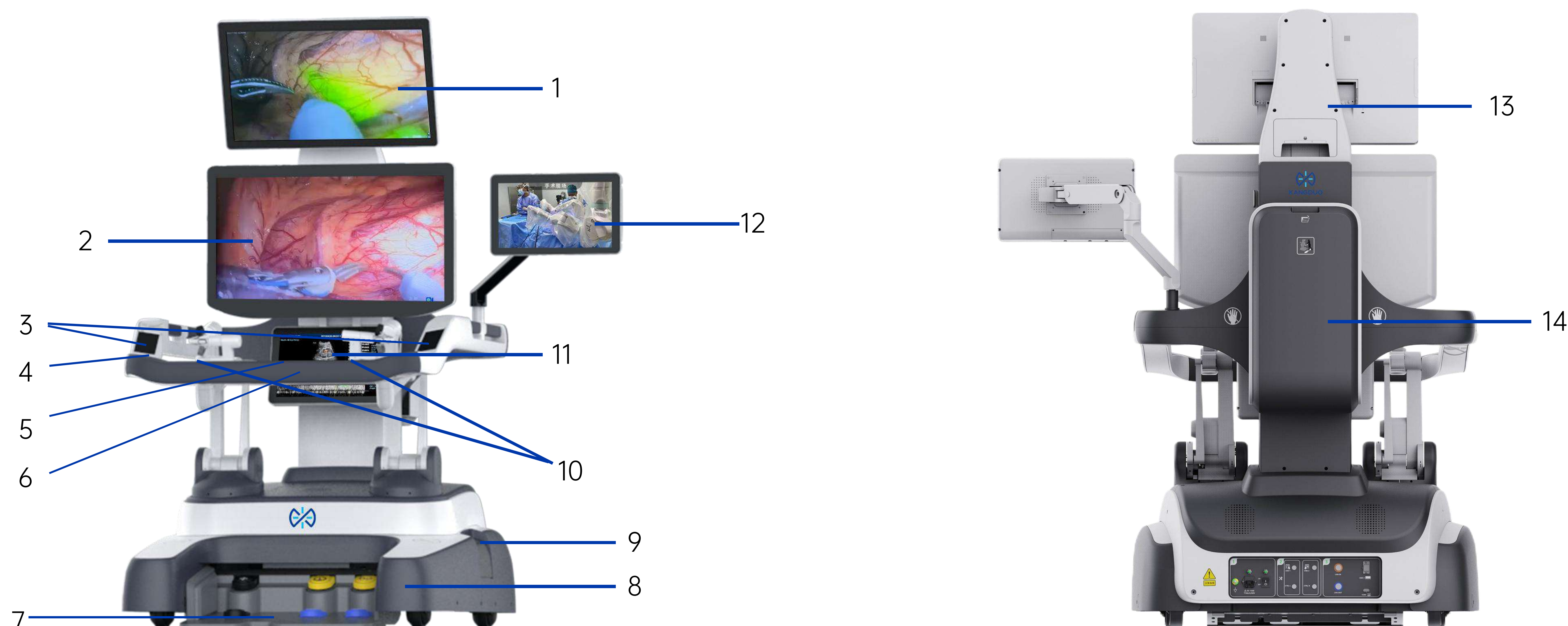


Provide multi-terminal extended image assistance, including high-performance image navigation functions such as 3D reconstruction navigation, real-time ultrasound imaging, bedside assistant scenes and remote surgical interaction. Improve the operator's operating efficiency, enhance information integration and presentation, and enable the operator to quickly obtain the required information and make accurate decisions.

Occupational Health Protection

The open console design avoids the operator's physical damage and visual fatigue caused by long-term fixed neck and waist posture, protecting the operator's occupational health.

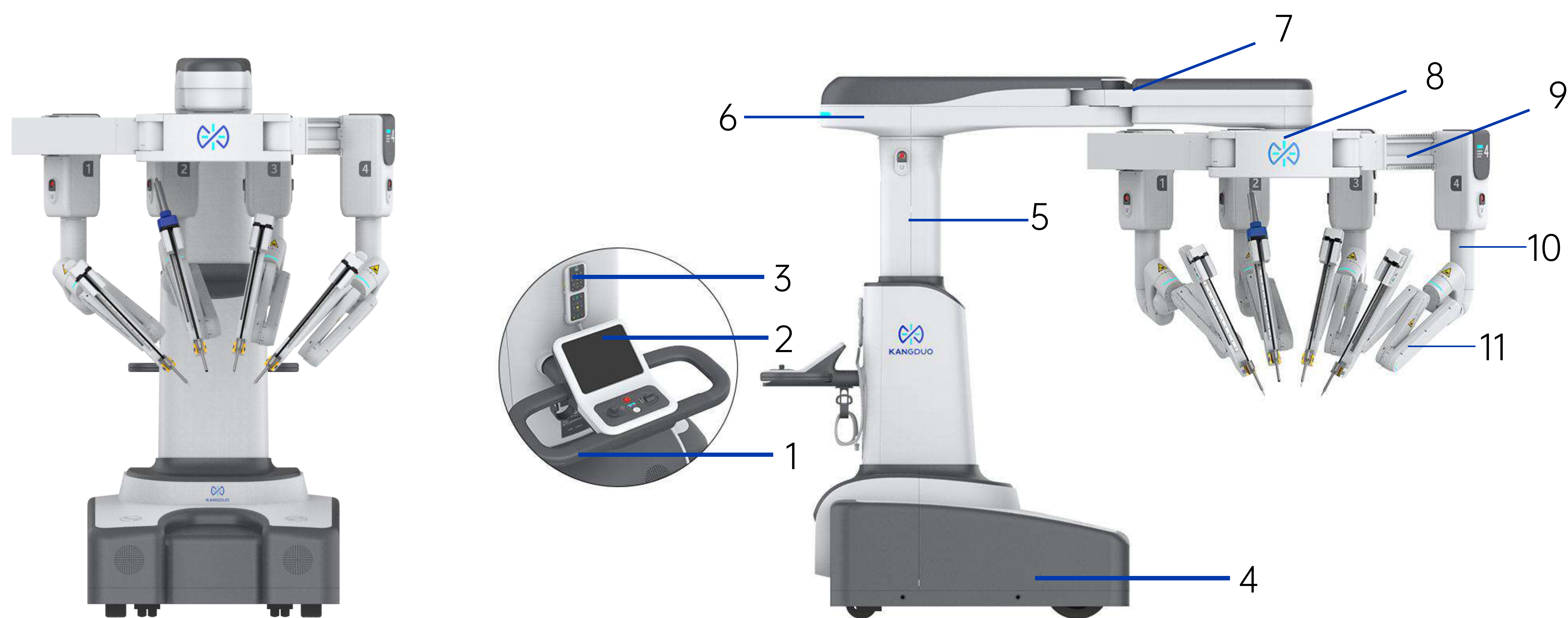




Surgeon Console Standard components

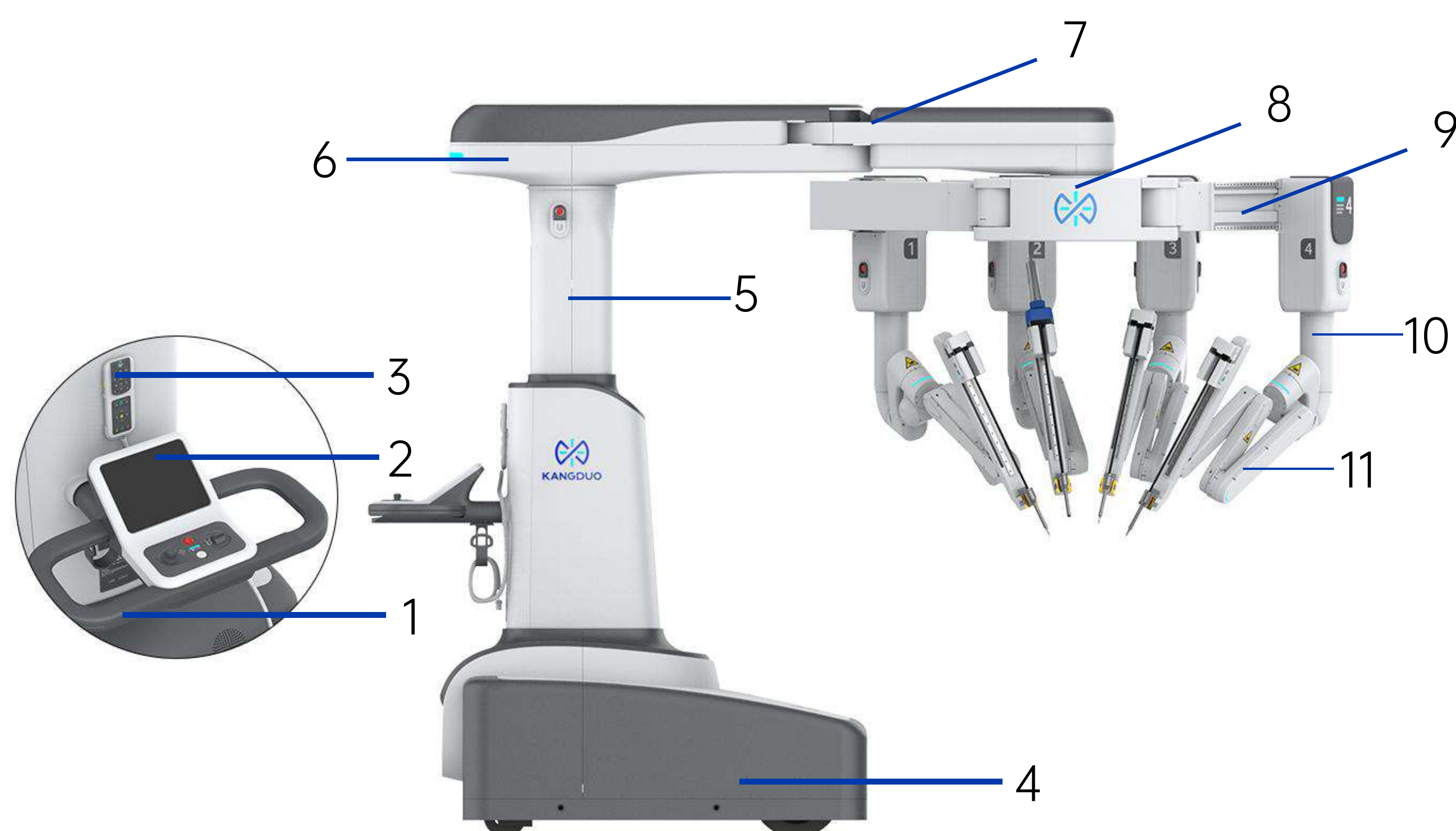
1. 27" Navigation Display	ICG navigation
2. 32" 4K 3D Display (P/N: EX3242-3D)	Display the surgical visual field and operation tips
3. (Left/right) Armrest Screen	Adjust intraoperative parameters.
4. Personalized Setting Panel	Adjust the surgeon console.
5. Touchpad	A control panel for image adjustment.
6. Handle	Include 3、4、5, power button ,emergency stop button and hand control lift button
7. Footswitch Panel	Used to activate various system modes.
8. Base	Rear panel with electronics and interface.
9. Brake Footpedal	Used to stabilize the doctor's console.
10. Hand Control	Used to obtain operator action information for master-slave operations.
11. 15.6" PACS Display	Used to display patient imaging data..
12. 15.6" Telesurgery Display	Left or Right option
13. Display Column	For supporting 1, 2, 11
14. Knapsack	For holding the surgeon console cable.

Patient Cart



The patient cart is a part of the endoscopic robotic surgical system to perform surgical actions. Its main function is to carry the instrument and endoscope. It is located in a sterile area during surgery. The surgeon at the surgeon console uses four robot arms of the patient cart to control the movement of the instrument and endoscope. The assistant is located next to the surgeon console to assist the surgeon in replacing the instrument and endoscope.

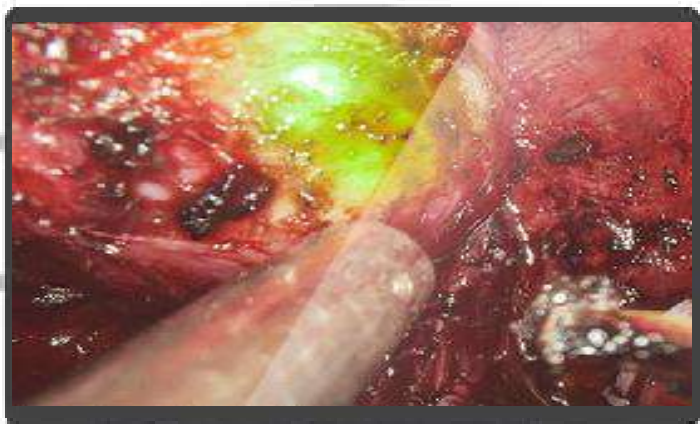
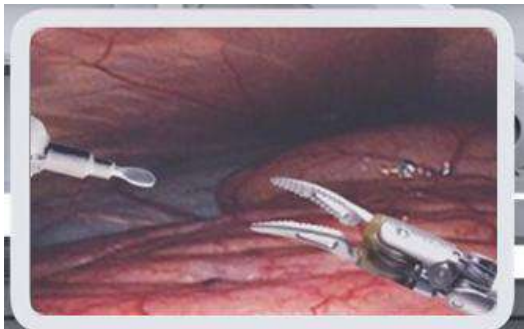
Patient Cart Standard components	
1. Handle	Have a column height control button, a push switch, an arm position control button, an emergency stop button and an power button.
2. Arm Control Screen	Have the functions of sterile unfolding, sterile folding, one-click positioning, position and position selection and activation.
3. Operating Handle of Patient Cart	Control the functions of turning the handle on and off, 17 lifting and lowering the large column, moving the cross laser and walking the patient cart.



Patient Cart Standard components	
4. Chassis	Include a driving device for positioning and electric walking and the electronic device and interface panel at the back of the chassis.
5. Large Column	The large column moves up or down.
6. Rear Beam	The rear beam is an important part of the linked boom rotation part system.
7. Front Beam	The rear beam is an important part of the linked boom rotation part system.
8. Boom Rotation Part	As the common base of four robot arms, the boom rotation part can rotate.
9. Small Beam	The angle between small beams can be adjusted, and the position of the smallcolumn can be adjusted back and forth.
10. Small Column	The small column moves the robot arm up or down and rotates the robot arm left or right.
11. Robot Arm	The robot arm fixes and moves the endoscope and instrument, and the distal end is connected to the trocar. The robot arm is provided with a function button, which enables the user to connect the robot arm to the trocar cannula during port connection.

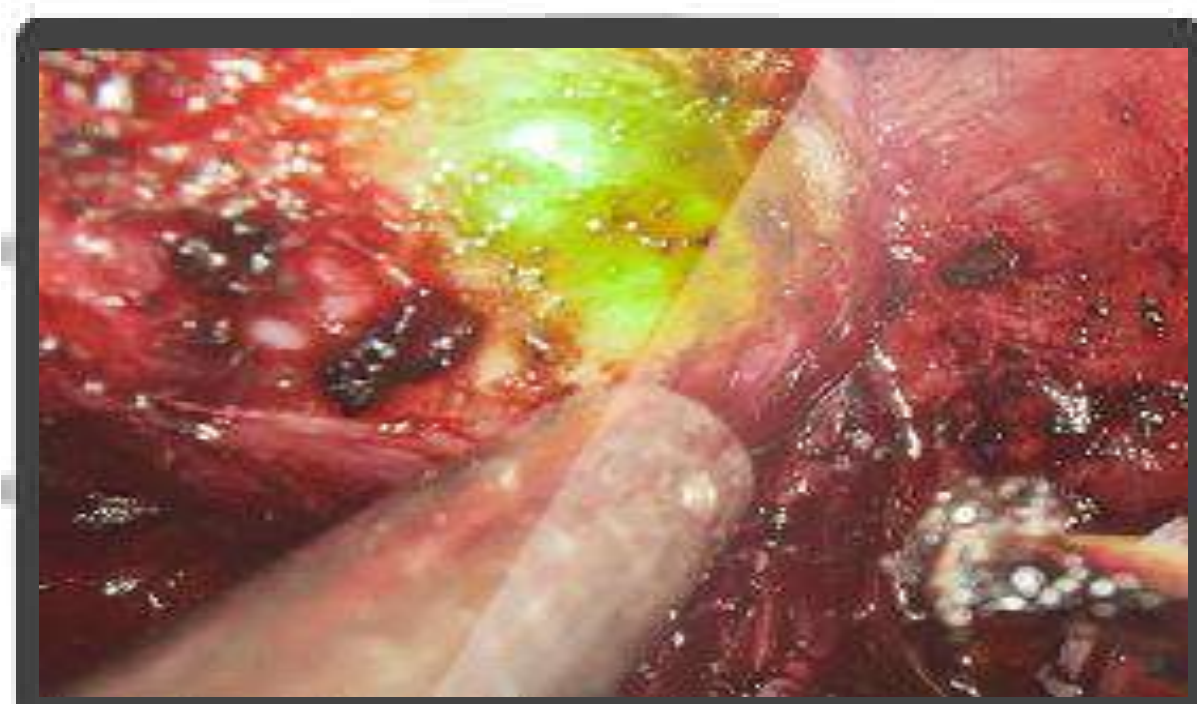
Vision Cart（Endoscopic Camera System）



Standard Components	Picture	Item Code	Description
32" 4K-2D Surgical Display		EX3242	See next page for details
3D Camera Control Unit		TDE-F410A	
Endoscopic Light Source		TLS-M811A	
4K ICG 3D Video Endoscope		TUL-E3010H	
Light Cable		Φ4.8X5000	/
15.6" System Information Display		/	Display the surgical visual field and operation tips that are consistent with the display content of the main display screen of the surgeon console.
Mobile Cart		/	Mobile Endoscopic Imaging System Cart and a Display Stand with VESA interface.

Endoscopic Camera System

32" 4K-2D Surgical Display



The 32" 4K-2D display provides ultra-clear image presentation, providing more comprehensive image information for the assistant doctor.

3D Camera Control Unit



- √ Electronic defogging, wide dynamic, vascular enhancement and other functions, it is suitable for more surgical scenarios.
- √ The native fluorescence was accurately displayed.
- √ Support 4K+3D video recording.

Endoscopic Light Source



- √ Visible light and near-infrared light output.
- √ Realize intelligent linkage control of endoscope host.
- √ Low power design, high brightness output.

4K ICG 3D Video Endoscope



- √ Achieve up and down, left and right and 360° flip function, sapphire mirror with heating function.
- √ 30°, maximum depth of field 200mm.
- √ Handle is light, 3D, 4K, fluorescent function switch freely.

Excellent design wins multiple awards



Reddot Design Award

INTERNATIONAL DESIGN EXCELLENCE AWARDS

So far, KANGDUO® has won a number of internationally renowned design awards, including the INTERNATIONAL DESIGN EXCELLENCE AWARDS and the German Reddot Design Award. This achievement not only demonstrates the product's outstanding achievements in design concept, user experience and industry contribution, but also further verifies its leading position in the field of global medical technology.

Flexible and Efficient Collaboration and Teaching

Multi-doctor Collaboration



The multi-doctor collaboration mode allows multiple operators to operate the robotic arm on site at the same time. It enables multiple operators to participate in different steps of the operation at the same time, improving the coordination and efficiency of the operation. Doctors can communicate and cooperate with each other in real time, optimize the operation process, reduce the operation time, and improve the overall quality of the operation.

In-operative Teaching and Real-time Interaction

The open console design enables the surgeon to communicate and collaborate with the assistant without any obstacles, and allows the instructor to observe the surgical field and the surgeon's hand and foot operation details in real time during the operation. Real-time interaction improves the teaching effect, allowing trainees to understand and master the operation more intuitively.



Remote Surgery System

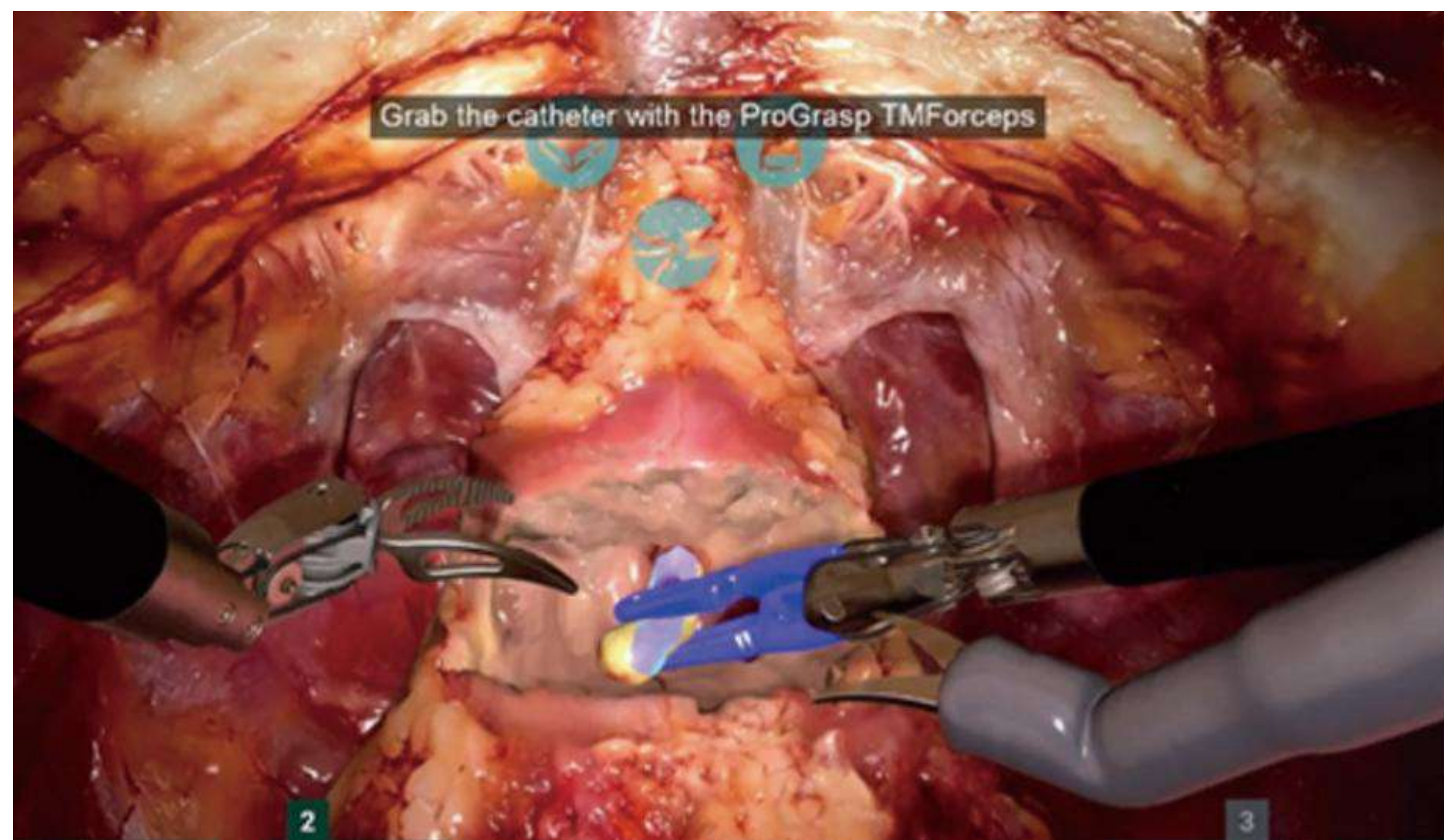


The remote surgery system supports real-time remote interactive teaching surgery in multiple locations. The secondary screen can provide line marking and annotation guidance during the operation, allowing remote experts to provide real-time surgical guidance and teaching.

The system also supports multi-disciplinary participation in diagnosis and treatment at the same time, and improves surgical safety and treatment effects through remote teaching and monitoring.

Improve Surgical Precision and Comfort

Simulation Training System



Relying on the most advanced scientific training methods (learning curve) and convenient training systems, operators can get started with actual operations faster. Training courses covering multiple stages allow trainers to create customized training plans for trainees and improve training efficiency.

Modular Laparoscope and Energy System

The endoscope and energy platform that integrate 4K and 3D fluorescence imaging technology can display fluorescence images and surgical field images in real time. The endoscope arm adopts a modular design, and the endoscope can be used for common surgery, improving the utilization rate of hospital equipment.



Digital Ecosphere



The intraoperative image marking function facilitates postoperative review. The cloud-based personal surgical video library supports sharing and communication at any time, and supports simultaneous playback of multiple surgical videos for intuitive comparative learning. Surgical data generation and analysis manages surgical skills and equipment performance, shortening the user's surgical learning curve.

Power Supply Specifications of Main Components

	Surgeon Console	Patient Cart	Vision Cart (Endoscopic Camera System)
Ratedvoltage	220VAC 50Hz	220VAC 50Hz	220VAC 50Hz
Input Power (long-term power)	600VA	1350VA	1,300VA(including the output power of power connection device of other device of 1,000VA)
Input Power (instantaneous power)	2100VA	2400VA	2,800VA(including the output power of power connection device of other device of 1,000VA)
Standby Power Supply	None	30min	None

Environmental Specifications

Operating Environment Conditions	
Temperature	10-35℃
Humidity	10-85%RH,No Condensation
Barometric Pressure	800-1,060hPa(Altitude of 2,000m)
Environment Conditions:Storage and Transportation	
Temperature	-20-60℃
Humidity	5-90%RH,No Condensation
Barometric Pressure	800-1,060hPa(Altitude of2 ,000m)

Physical Dimensions

	Surgeon Console	Patient Cart	Vision Cart (Endoscopic Camera System)
Height(minimum)	175cm	176cm	176cm
Height(maximum)	190cm	235cm	220cm
Folding Width	≤1m	<150cm	50cm at the front end and 80cm at the rear end
Folding Depth	130cm	<200cm	60cm
Weight	350kg	1050kg	220kg
Distance to The Ground	60mm	5.2cm	14cm

Dimensions of Packaging Box

	Surgeon Console	Patient Cart	Vision Cart (Endoscopic Camera System)
Length×Width× Height	2.38m×1.47m× 2.07m	2.44m×1.64m× 2.27m	1.25m×1.15m× 2.05m
Weight (including device)	740kg	1500kg	370kg



Distribution in Poland:

BERYL 
For Medical Professionals

Contact us

E-mail: sales@kangduorobot.com



+48 22 78 00 600



www.beryl-med.com



kontakt@beryl-med.com