Giving the Surgeon **Complete Control** in Robot-Assisted Partial Nephrectomy
Only the Hitachi Aloka robotically-controlled ultrasound transducer utilizes the full benefits of the precise Wrist Articulation of the robotic instruments providing significant benefits including:

- Direct surgeon control of the ultrasound probe
- Full robotic articulation to capture real-time images from every angle
- Greater accuracy and precision to ensure identification of the entire tumor surface
- Seamless integration with the robotic grasping instruments
- Ability to simultaneously view real-time ultrasound images as a picture-on-picture display
- Accessibility of the transducer from multiple ports
- Flexibility to grasp and release the probe as needed
- Proven effectiveness for minimally invasive Robot-Assisted Partial Nephrectomy (RAPN)

Unique attaching mechanism allows for easy grasping and releasing
1. Ultrasound probe is introduced through a standard trocar or assistant port.

2. Surgeon engages the transducer using the robotic grasper for “Direct Control”.

3. Leverage all the benefits of the full Wrist Articulation of the robotic instruments.

4. Capture real-time ultrasound imaging, even at complex angles and difficult-to-reach areas for complete tumor identification and removal.
Complete Control. Improved Efficiency. Better Results.

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Providing Robotic Surgeons with Unprecedented Control

Another first from the worldwide leader in intraoperative ultrasound. Hitachi Aloka has designed the first robotically-controlled ultrasound transducer giving surgeons direct control of the real-time imaging during minimally invasive RAPN procedures. After engaging the probe with the robotic graspers, the surgeon now completely controls the probe’s movements rather than directing a surgical assistant. From the robotic console the surgeon remotely guides the probe’s movement with greater precision, dexterity and control than ever before.

Transducer fully articulates to reach complex angles that are not possible with traditional laparoscopic ultrasound.

Real-time ultrasound imaging facilitates localization of tumor margins for proper resection.
Full Wrist Articulation™ to Accurately Identify Tumors

The Hitachi Aloka transducer utilizes the full benefits of the Wrist Articulation of the robotic instruments to capture real-time ultrasound imaging even at complex angles that are not possible with traditional laparoscopic ultrasound. This enhanced range of motion allows surgeons to access difficult-to-reach areas, such as the back of the kidney, to more accurately identify tumor location, depth and borders for distinguishing between tumor and normal kidney.

Increased Precision and Speed for RAPN

Unlike current laparoscopic ultrasound techniques that require active participation from a surgical assistant, the Hitachi Aloka transducer is maneuvered entirely by the robotic surgeon. Utilizing the precise robotic instrument movements, surgeons have incredible range of motion with the robotically-controlled probe. They can navigate the entire kidney while simultaneously viewing the real-time ultrasound images as a picture-on-picture display, eliminating the need to leave the robotic console.

Hitachi Aloka’s transducer ensures comprehensive identification of the entire tumor surface.
The **Innovator** in Ultrasound

Hitachi Aloka understands that you and your patients demand nothing but the best. As the worldwide leader in intraoperative ultrasound all of Hitachi Aloka’s resources are dedicated to ultrasound innovation. From developing the world’s first commercially available diagnostic ultrasound system over 60 years ago, to today delivering yet another first with the robotically-controlled ultrasound transducer.

That’s why our commitment to surgeons allows us to offer a wide range of consoles and specifically designed transducers to meet every need. Recognized for our superior image quality, outstanding system reliability and intuitive use of cutting-edge technology, Hitachi Aloka remains the standard in the field of ultrasound for surgeons.

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