

Ultimate Capability and Versatility

# X CUBE 70



# Empowering Quality Care for Every Patient

Focused on the needs of healthcare providers for the higher quality of patient care, X-CUBE 70 could be born with Alpinion's premium imaging platform, X+ Architecture, enabling high resolution, high sensitivity, wideband transducers and the software for various applications. Beyond that, newly designed transducers and smart workflow bring more comforts to the patients and reduce the time to diagnosis.

## X+ Architecture

X+ Architecture is a premium imaging platform created by combining X+ FIT, ALPINION's cutting edge beamforming and data processing technology and X+ Crystal signature™, the transducer technology with high sensitivity, wideband.

X+ FIT is a new technology that transmits ultrasound beam width sharply, receives a large volume of data and processes it at a high speed. In addition, X+ Crystal signature™ applies a single crystal and our own special material in the transducer to achieve excellent clarity to extend insight.



### Spatial Resolution ↑

X+ FIT's beamforming technology based on X 10 data transmission speed  
X 14 data processing speed

\* Compared to our previous model  
(E-CUBE 15 Platinum)



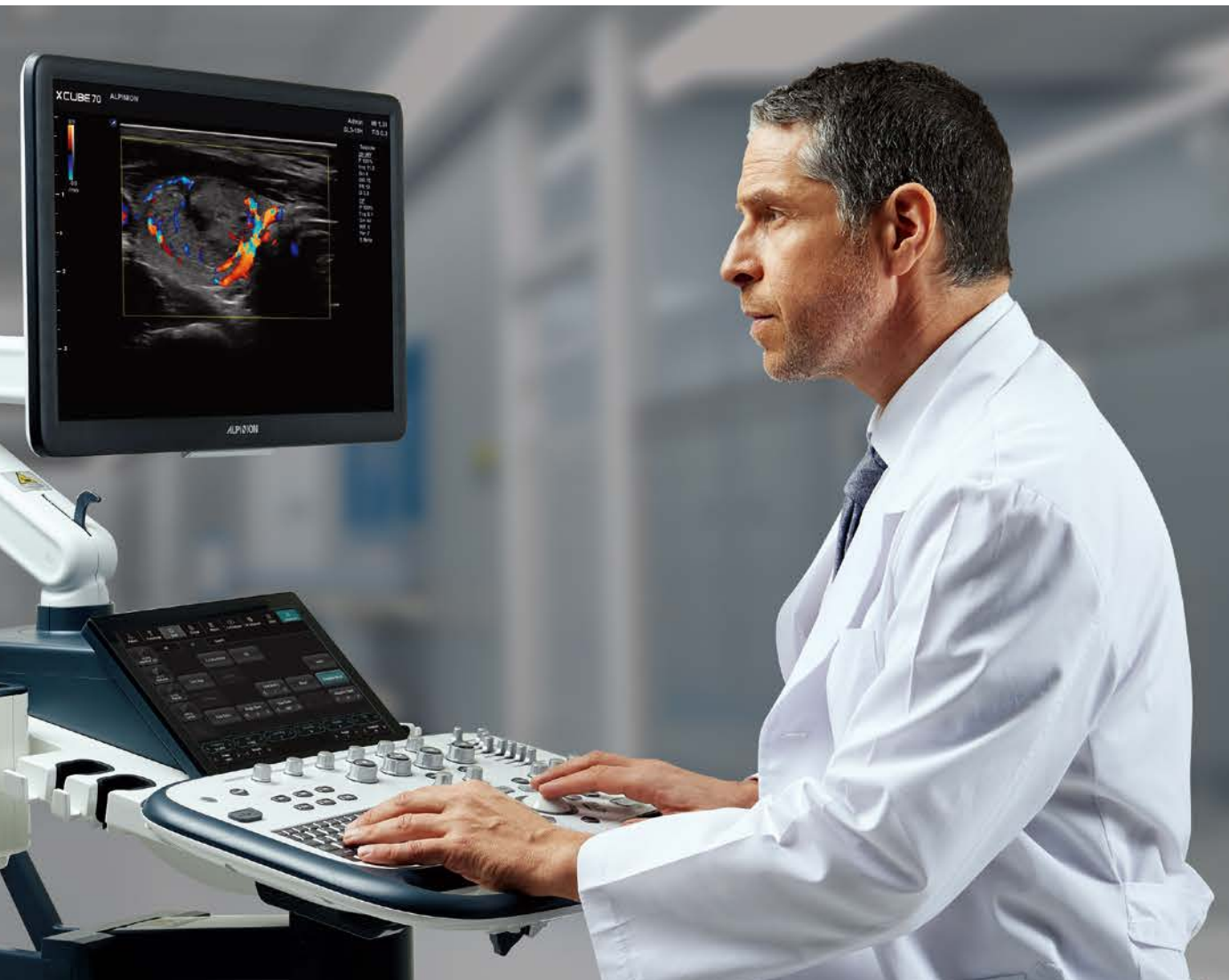
### Frame Rate ↑

X+ FIT's multi-beam receiving technology



### Sensitivity & Penetration ↑

X+ Crystal signature technology applied new single crystal and special materials



## X<sup>+</sup> FIT

X<sup>+</sup> FIT is a beamforming technology which improves resolution, frame rate, and uniformity. X<sup>+</sup> FIT utilizes massive parallel beamforming whose architecture is capable of transmitting 4 times larger volume with 10 times faster capacity and also processing data 14 times faster than our previous model (E-CUBE 15 Platinum). X-CUBE 70's high resolution imaging is a prerequisite for accurate diagnoses and quick decision-making.

## X<sup>+</sup> Crystal signature™

Upgraded single crystal and a special material matching layer and backing material allow heat dissipation and minimize signal loss. ALPINION's signature transducer technology allows you to experience insightfully clear image quality with high sensitivity and wideband, which shows significant improvements in image resolution, contrast, and uniformity. ALPINION develops and manufactures its own transducers, the key to ultrasound imaging.

X-CUBE 70

# eXtensive Insight

The smart diagnosis technology of X-CUBE 70 can visualize the complicated area and obtain objective figures instead of giving subjective images, therefore more confident and faster diagnosis is possible. Also the excellent image quality based on X<sup>+</sup> Architecture makes the healthcare providers to improve their insight by enhancing the accuracy.

X-CUBE 70 makes you achieve higher accomplishment.



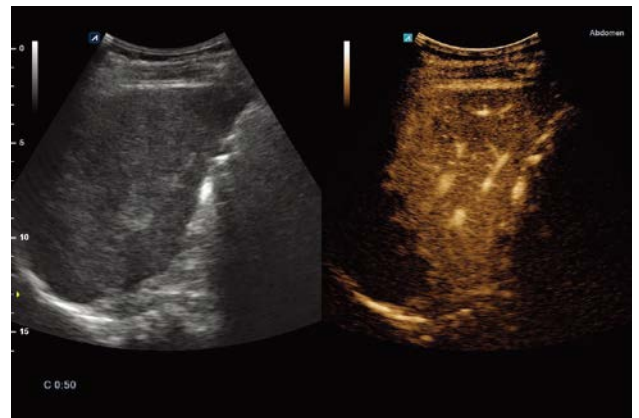
## X<sup>+</sup> MicroView

X<sup>+</sup> MicroView is the vascular imaging mode which displays micro blood flow. Users can observe the low-speed blood flow of tiny blood vessel. With this technology, low-speed blood flow areas which users previously couldn't see on Color Doppler are shown at the fast frame rate.



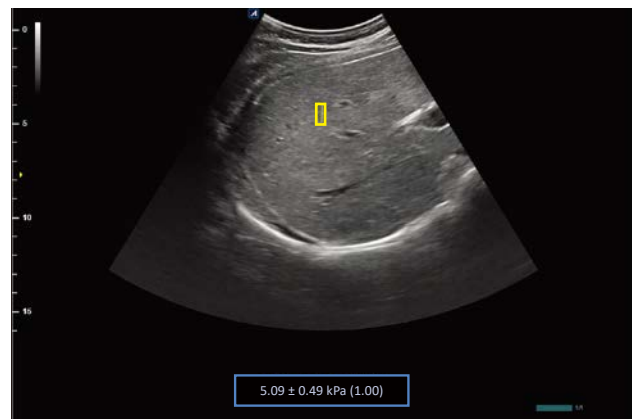
## CEUS (Contrast Enhancement Ultrasound)

This is a function to diagnose patients using various angiographic patterns that appear while a contrast medium, administered intravenously, diffuses in blood vessels and organ tissue. CEUS has many advantages in various clinical indications for liver disease.



## X<sup>+</sup> pSWE

Point Shear Wave Elastography shows objective quantified stiffness of tissue using the radiation force from a focused ultrasound beam. Users can identify significant liver fibrosis non-invasively, so it reduces unnecessary biopsies and increases patient satisfaction. Especially X<sup>+</sup> pSWE ensures the highest reliability of measured results by displaying the Reliability Index.



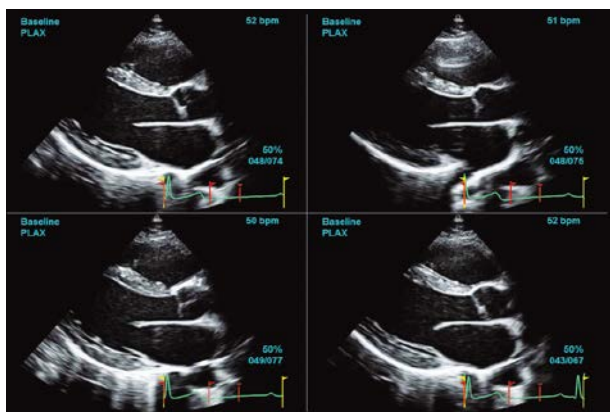
## X<sup>+</sup> Assistant

X<sup>+</sup> Assistant enables users to reduce keystrokes by at least 50% and save time when conducting examinations. The optimal scanning protocol registered according to each application guidelines increases the work efficiency by reducing examiner's fatigue. The personal optimized protocol can be registered. Also, it ensures users to examine without missing and the examination consistency can be enhanced even if there are a number of operators.



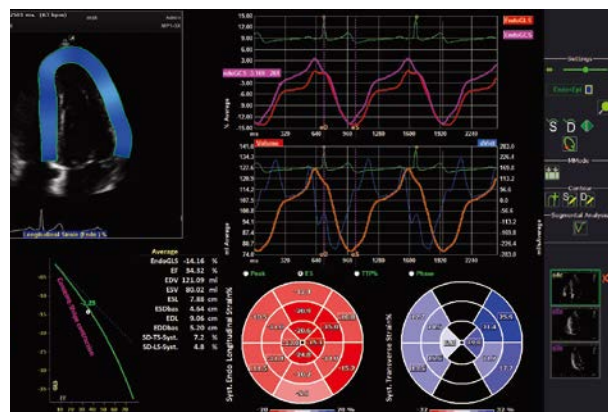
# Precise Diagnosis with Clear Images and Essential Tools

ALPINIION provides precise diagnostic solutions considering the limit of users resources and the needs of fast examination rotations. MP1-5X transducer with X<sup>+</sup> Crystal signature and the premium imaging platform, X<sup>+</sup> Architecture, bring high quality heart images with high sensitivity and frame rate. Experience the improved quality of diagnosis with X-CUBE 70.



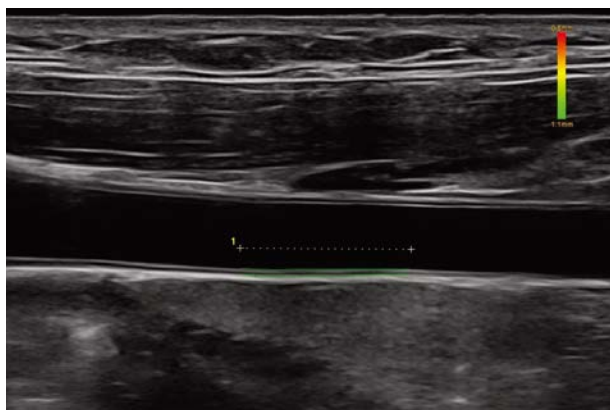
## Stress Echo

It can help the early diagnosis of coronary heart disease with quick and ease process of the Stress Echocardiogram with the optimized examine work flow.



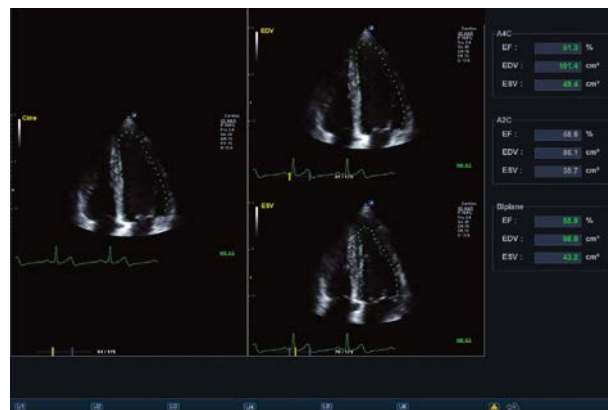
## CUBE Strain™

As a non-invasive examination method to assess the myocardial function more objectively, it can confirm the quantified data by tracking the speckle of 2D cardiac imaging and quantifying the movements of each myocardium.



## Auto IMT

Auto IMT allows you to automatically measure intima-media thickness of carotid arteries. It enables more reliable and reproducible assessment.



## Auto EF

Auto EF can evaluate and measure contraction of the left ventricle by automatically calculating Ejection Fraction (EF). In addition to EF, this function also provides ESD and ESV information to display volume change of the left ventricle.

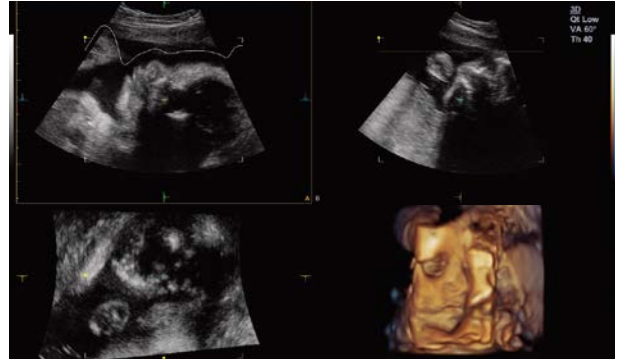
# eXpanded Capability

## Smart Technology Simply Delivers Vivid View



### X<sup>+</sup> Auto Biometry

When measuring Estimated Fetal Weight (EFW), the smart recognition algorithm allows you to automatically identify a structure of interest and measure fetal head circumference (HC), biparietal diameter (BPD), femur length (FL), abdominal circumference (AC) and Humerus. This feature boosts a examination speed and a high accuracy.



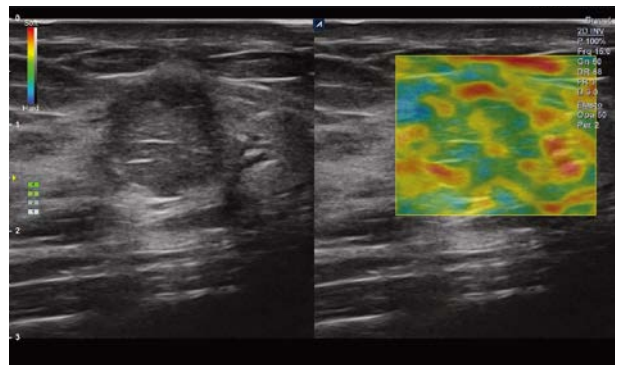
### Clear Face

Clear Face detects the fetus face automatically and removes all structures such as umbilical cord, hand and feet etc, which covered the fetus face during scan. It meets the demands of maternities and users for significantly reducing examine time to find the fetus face.



### Silhouette Imaging

This new technology provides silhouette outlines of the human fetus and other structures clearly. By using Live HQ™ technology with a shadowing effect, Silhouette imaging technology allows to delineate the outlines of structures behind the directly visualized structure.



### Elastography

Elastography is the ultrasound imaging technology to show the relative differences of the tissue elastic level by the external pressure. It can provide the additional pathologic information and help to reduce unnecessary biopsy.



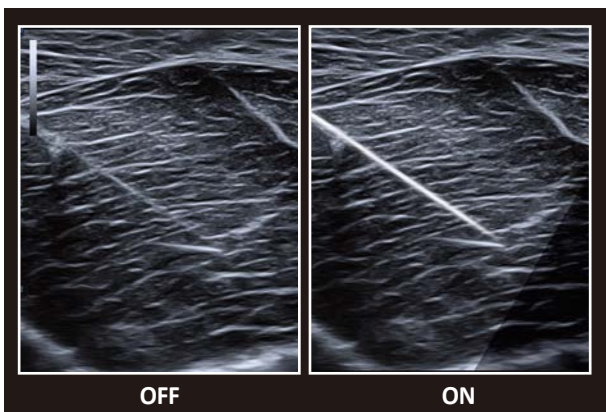
### 3D Speckle Reduction Imaging (SRI)

Removing the noise of volume data, the contrast of image is improved.



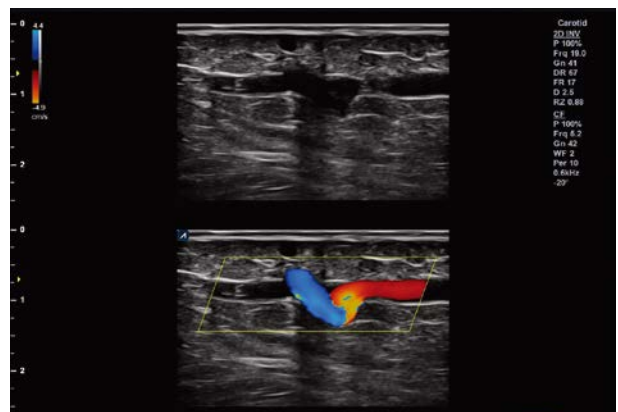
### Depth View

A rendering mode to give the three dimensional effects by different colors on each depth.



## Needle Vision™ Plus

Needle Vision™ Plus is useful function to show the shape and direction of needles clearly during the invasive exam using the Beam Steering technology.



## Vertical View

Live Dual mode supports not only horizontal view but also vertical view. It is convenient to see a wide area such as 5 mm linear transducer images in comparison.



# eXceptional Care

The convenient and safe management system of X-CUBE 70 improves the work environment more streamlined for healthcare providers. To achieve your professional goal and provide an exceptional care, spend more time examining and caring for patients, instead of wasting time to search and transmit data. The data management technology of X-CUBE 70 with the optimized setting for the priority of physicians and the patient information protection system provide you more efficient medical care.



## X<sup>+</sup> Compare

This is a feature that allows users to import patients' previous study from a PACS server or hard disk and compare when scanning and reviewing. By comparing previous images of the same region, users can easily observe the patient's progress, thereby making this feature useful for providing patient care. X<sup>+</sup> Compare can be used not only in scan mode, but in review mode (E-View) as well.

\* X<sup>+</sup> Compare supports ultrasound studies only.

## Antivirus Solution

As its automatic virus scanning function is activated whenever the system boots, patients' information is more securely protected.

## USB Real Time Recording

USB real-time recording makes data storage easier by allowing users to record ultrasound scan images on USB memory in real time. Videos are recorded as high-definition and stored in system quickly.

## Customizable User Interface

It provides 13 User Keys to fit the personal preference. The preset UI of touch panel can also be changed to set the frequent function on the front to easily recognize.

# Intuitive Design for Your Daily Practice



## 23 inch FHD LED Screen

Enjoy a larger widescreen and clear, high definition images.



## Tilting Touch Panel

12.1 inch high resolution touch panel allows users to tilt up to 15° for user convenience.



## Motorized Control Panel

The control panel can be easily adjusted vertically with its motorized button.



## Swivel Wheel Lock

On the system moving, by the attached swivel lock to control the direction of the rear wheel, the system can move in a straight line.



## Additional Transducer Holder

Providing more ease to pick up the transducer and gel, the additional holder provides a convenient diagnostic environment to fit the body shape of user.



## Time Saving Solution

The built-in battery guarantees mobility while it is in use and Sleep mode helps the system boot up faster.



## X-CUBE 70

- System with Electric UDM
- Width: 580 mm
- Depth: 835 mm
- Height: 1,440 - 1,605 mm
- Weight: approx. 85 kg (System only)
- Electric motorized control panel adjustment
  - Range of height: 165 mm
  - Left/right swivel:  $\pm 30^\circ$
- 5 transducer ports
  - 4 active transducer ports
  - 5th transducer port is optional



# Transducers

Developed and Manufactured by ALPINION \* A biopsy kit is available.

## Convex



**SC1-7H \***  
**X<sup>+</sup> Crystal signature™**  
 High Density Single Crystal Convex  
 Abdomen, OB/GYN, Pediatric, Urology, EM



**SC2-9H <sup>New</sup>**  
**X<sup>+</sup> Crystal signature™**  
 Abdomen, EM, OB/GYN, Pediatric, Urology



**SC2-11H <sup>New</sup>**  
**X<sup>+</sup> Crystal signature™**  
 High Density Single Crystal Microconvex  
 Abdomen, EM, OB/GYN, Pediatric



**SVC1-8H**  
 High Density Single Crystal Volume Convex  
 Abdomen, OB/GYN, Pediatric, Urology, EM

## Linear



**SL3-19X \* <sup>New</sup>**  
**X<sup>+</sup> Crystal signature™**  
 Extreme High Density Linear, Seamless window  
 Abdomen, Pediatric, OB/GYN, EM, MSK, Vascular, Small Parts, TCD



**SL3-19H \***  
**X<sup>+</sup> Crystal signature™**  
 High Density Single Crystal Linear, Seamless window  
 MSK, Vascular, Small Parts, Pediatric, EM, Abdomen, OB/GYN, TCD



**L3-15H \***  
 High Density Linear  
 MSK, Vascular, Small Parts, EM



**L3-12X \***  
 Extreme High Density Linear  
 MSK, Vascular, Small Parts, Pediatric, EM



**L3-8H \***  
 High Density Low Frequency Linear  
 Breast, EM, MSK, Vascular, Small Parts



**L10-25H**  
 Wideband Ultra High Linear, Seamless window  
 MSK, Vascular, Small Parts, EM

## Endocavity



**EC2-11H \***  
**X<sup>+</sup> Crystal signature™**  
 High Density Single Crystal Endocavity (Straight), Small tip, FOV Max. 230°  
 OB/GYN, Urology, EM



**EV2-11H \***  
**X<sup>+</sup> Crystal signature™**  
 High Density Single Crystal Endocavity (Curved), Small tip, FOV Max. 230°  
 OB/GYN, Urology, EM



**VE3-10H \***  
 High Density Volume Endocavity  
 OB/GYN, Urology, EM

## Phased Array



**MP1-5X**  
**X<sup>+</sup> Crystal signature™**  
 Extreme High Density Single Crystal Phased Array  
 Abdomen, Pediatric, Cardiac, EM, TCD



**SP3-8T**  
 Single Crystal Phased Array  
 Abdomen, Cardiac, EM, Pediatric

## Pencil



**CW2.0**  
 Pencil Typed Cardiac



**CW5.0**  
 Pencil Typed Cardiac



**CW8.0**  
 Pencil Typed Cardiac

# XCUBE 70

eXtensive Insight  
eXpanded Capability  
eXceptional Care



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