



**ALPINION MEDICAL SYSTEMS** We are Ultrasound Professionals





#### ALPINION MEDICAL SYSTEMS Co., Ltd.

77, Heungan-daero 81beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, Korea Homepage www.alpinion.com E-mail international@alpinion.com TEL +82-2-3282-0900 FAX +82-2-851-5591

Standalone clinical images may have been cropped to better visualize pathology.

Copyright©2019 ALPINION MEDICAL SYSTEMS CO., LTD. All rights reserved. Catalogue contents may change without prior notice to customers due to performance enhancements.

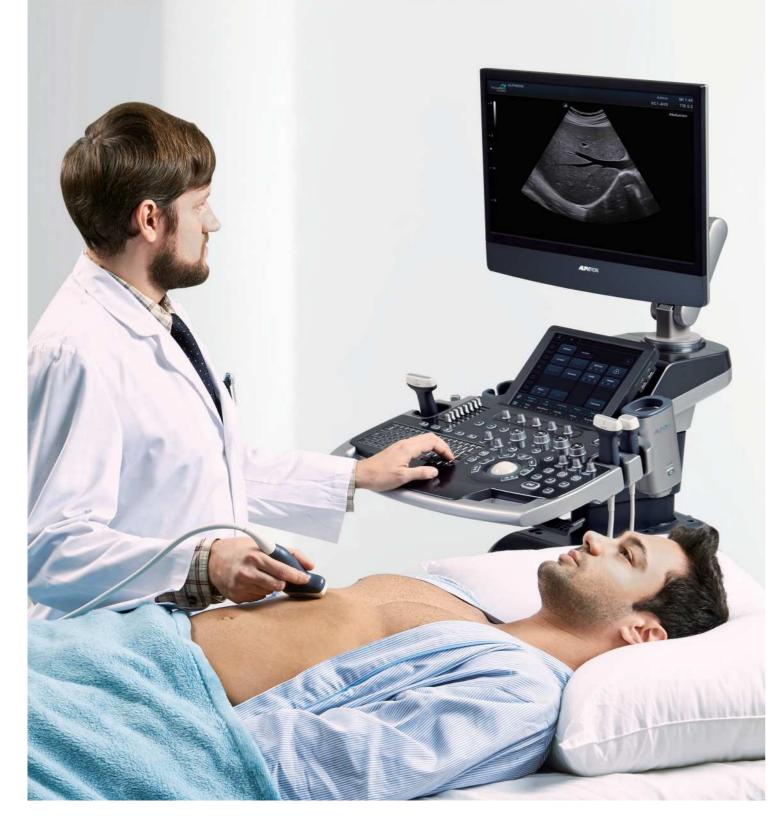


0



# **Excellent** imaging performance helps you make clinical decisions with confidence

The E-CUBE 8 Series' high-performance transducers and system realize high-resolution images. The high image clarity assists you in performing examinations more quickly and making more accurate diagnoses.



## Single crystal convex : SC1-4H / SC1-4HS / SC1-6H

Crystal Signature<sup>™</sup> is Alpinion's proprietary technology, capable of achieving thermal conversion efficiency that is over 90% higher than PZT. This premium material can deliver clear, detailed images because its sensitivity to signals has been enhanced through more efficient dispersion of ultrasonic waves. \*Available on E-CUBE 8 Diamond

## High-frequency linear : L8-17H / IO8-17

The high-frequency linear transducers can be attached to the E-CUBE 8 Series. Several footprint width options and outstanding linear image quality help with breast, thyroid, musculoskeletal, and vascular examinations. \*Available on E-CUBE 8 Diamond

# High-performance system

## **Flagship model-grade platform**

### **Optimal Imaging Suite™ Plus**

By combining Alpinion's image optimization processing technologies-SCI, FCI, FTHI, PITHI, and SRI/FullSRI<sup>™</sup>—artifacts are effectively eliminated and boundaries between tissues are distinguished more clearly. The broader grayscale range also enables the clearer expression of tissue textures and greater data accuracy.

### Frame rate increasing technology

The image resolution and frame rate of the E-CUBE 8 Series have been improved with the application of technology that increases the high-pulse repetition frequency (PRF). Now, images can be quickly optimized in 2D Mode and Spectral Doppler Mode.

### Xpeed™



## High-resolution transducers

Equipped with Alpinion's top-grade platform, the E-CUBE 8 Series is fitted with high-end hardware and software. The resolution, contrast, and uniformity of its 2D images have been improved, and with the addition of the Dual Pulser, clear and accurate Doppler data can be displayed while maintaining sharp 2D images in Doppler Combined Mode.

Simply press the Xpeed<sup>™</sup> button once to quickly optimize images in 2D Mode and Spectrum Doppler Mode. Detect, predict, and adjust the Dynamic range level in real-time. It displays images optimized and customized for different clinical cases.

# Simple yet valuable design improves your efficiency in daily practice

The E-CUBE 8 Series is designed for patient-oriented workflow. The user can better focus on patient care because the E-CUBE 8 Series can be easily and conveniently used in different clinical environments.



## Designed for user environments

#### 21.5-inch full HD LED monitor

The 1,920×1,080 pixel high-resolution monitor delivers sharp, clear ultrasound images. By implementing IPS (In-Plane Switching) technology, image distortions are eliminated and a wider field of view can be provided. As the user can easily review images without being restricted by location or environment, it's not only more convenient to carry out diagnoses, but their accuracy is also improved.



1.5 inch

#### **10.4-inch touchscreen**

The capacitive touchscreen features high sensitivity, and its convenience and efficiency has been improved with an intuitive UI design, just like on the tablet devices that we're familiar with.

\*Available on E-CUBE 8 Diamond / E-CUBE 8



Everlasting productivity

#### Articulating monitor & adjustable control panel

The monitor is horizontally and vertically adjustable, so you can freely use it, regardless of how the patient may be positioned. You can move the monitor up to 140 mm vertically, rotate it up to 90° horizontally, or tilt it up to +15°/-90°. The control panel's height can also be adjusted easily to suit your needs.

\*Available on E-CUBE 8 Diamond









The control panel has a keyboard at the top, making it easy to access. Frequently used functions can be assigned to the three user keys, which are arranged for easy access on the control panel. By minimizing the number of unnecessary keypresses, user workflow is made more efficient and user fatigue is reduced. The brightness level of the backlight of the control panel is adjustable, so it can used in darker environments.

### SSD for quick exam preparation

#### USB 3.0 for better patient care

The E-CUBE 8 Series feature a USB 3.0 port. Compared to the current USB 2.0 ports, the data transfer speed for USB 3.0 ports is about ten times faster. The USB 3.0 port reduces the transfer time when exporting data for your patients or research data, allowing the user to focus more on patient care.

### Battery that frees you from space restrictions

The combination of compact exterior design and attached battery makes the E-CUBE 8 Series much easier to transport. By removing reliance on a power cable, the user can transport the unit to a different location while in Exam Mode, then resume the examination right away. More time can be reserved for patient care by reducing the time spent on turning the system off, then back on.







The gel warmer warms up the ultrasound gel before examination. The temperature can be adjusted to three settings according to the situation. This helps provide a more comfortable examination experience for patients.

## **Compact transducer connector**

# **User-oriented** design

### **Power Preset**

The user can load a system preset saved in advance with a single touch. By using these quick and easy presets, you can shorten the imaging setup time.

#### Built-in gel warmer (optional)

The E-CUBE 8 Series' transducers implement compact and light connectors: the system is slim, but does not take up much space, even with up to four transducers connected. You can effortlessly disconnect or reconnect the transducers, even in tight spaces, making it easier and more comfortable to scan patients.

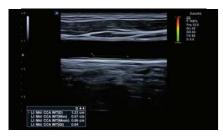
#### **User-friendly control panel**

The E-CUBE 8 Series uses high-end hardware, including an SSD. This results in higher system stability and faster boot times that can speed up preparation for examinations.

# **Enhancement of diagnostic flow** provides accurate patient care in making informed decisions

The E-CUBE 8 Series is a multi-purpose system that can be used in all specialized areas that require ultrasound imaging, such as internal medicine, obstetrics/gynecology, orthopedics, etc. It broadens the application range of ultrasound examinations and ensures accurate diagnoses through premium-grade software diagnostic tools.





#### **Auto IMT**

When the user draws a line in the area where the carotid intima media thickness is to be measured, the thickness will be automatically measured and displayed on the screen. Measurements can be made more quickly and accurately, down to the millimeter level, regardless of the user's proficiency.



### **CUBE Strain**<sup>™</sup>

This is a non-invasive examination method that is used more objective assessment of the myocardial function. The user can track speckles on 2D heart images, digitize the movement of each myocardial segment, and check the quantified data.



#### Stress Echo

The optimized examination workflow allows the user to perform a Stress Echocardiogram more quickly and conveniently, aiding in the early diagnosis of chronic coronary heart disease.



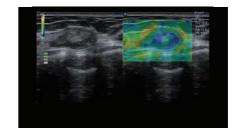
#### Live HQ<sup>™</sup>

With improved volume rendering technology, the light source can now be freely moved and the optimized color map can be applied in a variety of different ways. Realistic volume images make fetal anatomy easier to understand, which leads to more accurate and quicker diagnoses. Better, more realistic imagery also helps create bonds between parents and their babies.



#### Volume Master<sup>™</sup>

Volume Master™, Alpinion's 3D/4D feature, enables you to obtain reproducible planes and better anatomical views, which can't be obtained with 2D scanning. Multi Planar Rendering (MPR), Cubic View, and Multi Slice View (MSV) provide clinical benefits comparable to a CT or MRI.



## Elastography

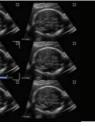
Elastography intuitively shows the relative differences in tissue elasticity caused by external pressure using colors. It provides additional pathological information and helps reduce the need for unnecessary biopsies. The Indication bar shows whether the amount of pressure on tissue is appropriate in real time on a scale of 1 to 6, thus improving the credibility of results.

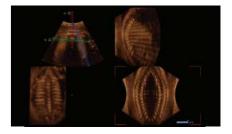




#### **Auto NT**

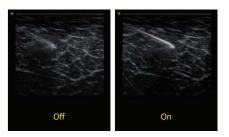
When the user draws a ROI box in a desired measurement area during a nuchal translucency scan, the maximum thickness will be automatically measured and displayed on the screen. The examination results can be quickly checked, even in busy examination environments.





#### Volume Advance<sup>™</sup>

Together with Volume Master<sup>™</sup>, Volume Advance<sup>™</sup> provides more advanced features for handling volume data: these include Free Angle MSV, AnySlice<sup>™</sup>, and Volume Analysis. You can slice a desired section and consecutively display slices. This enables anatomical and pathological characteristics and volume information to be delivered more accurately and in greater detail.



### **Needle Vision™ Plus**

Using Beam Steering technology, this feature is useful in showing the shape and orientation of the needle. During invasive ultrasound-guided procedures using the linear transducer, the needle can be viewed more clearly by adjusting the beam angle in three steps, ensuring safer and more accurate procedures.

# In-house Developed & Manufactured **Transducers**

Alpinion carries out in-house development and manufacturing of its transducers. Reliable quality / Best compatibility / Cheaper maintenance / Faster repair

#### **Transducer Guide**

#### Convex



Available on E-CUBE 8 Diamond

Linear







C5-8NT

108-17

High frequency

hockey stick linear Intra-operative, Pediactric,

Small organ, Musculoskeletal

\*Available on E-CUBE 8 Diamond

(MSK), Peripheral vessel

SC1-6H 粩 C1-6CT 🛠 High density C-Architecture single crystal convex Fetal, Abdominal, Pediatric, Musculoskeletal(MSK), Peripheral vessel, Urology

(PowerView<sup>™</sup>) convex Fetal, Abdominal, Pediatric, Musculoskeletal(MSK), Peripheral vessel, Urology

SC1-4HS 🗱 Wide angle high density single crystal convex Fetal, Abdominal, Pediatric, Musculoskeletal(MSK), Peripheral vessel, Urology ailable on E-CUBE 8 Diamond

L3-12HWD

High density linear,

64mm wide footprint

Fetal, Abdominal, Pediatric,

Small organ, Musculoskeletal

(MSK), Peripheral vessel

VE3-10H 粩

Micro convex single crystal convex Abdominal, Pediatric, Neonatal cephalic, Cardiac, Fetal, Abdominal, Pediatric, Peripheral vessel Musculoskeletal(MSK), Peripheral vessel, Urology \*Available on E-CUBE 8 Diamond

SC1-4H 🗱

High density

L3-12T 粩

Abdominal, Pediatric, Small

organ, Neonatal cephalic,

Musculoskeletal(MSK).

Peripheral vessel

Linear

**Volume Endocavity** 

VC1-6T Volume convex

\* A biopsy kits is available

**Volume Convex** 

#### Fetal, Abdominal, Pediatric, Urology



### **Convenient System Update**

Alpinion's unique imaging platform, FleXcan<sup>™</sup> Pro Architecture, realizes consistency of image quality and convenience of system upgrades throughout the product's life cycle. All core elements of the diagnostic ultrasound system are software-based so that customers can keep their system up-to-date with easy and speedy upgrades.

| L8-17H  | L3-12H ≭   |
|---|--|
| High density linear   | High density linear  |
| Fetal, Abdominal, Pediatric,<br>Small organ, Neonatal cephalic,<br>Musculoskeletal(MSK),<br>Peripheral vessel<br>*Available on E-CUBE 8 Diamond | Abdominal, Pediatric, Small<br>organ, Neonatal cephalic,<br>Musculoskeletal(MSK),<br>Peripheral vessel |

# **Endocavity**



EC3-10T 🗱 Endocavity (straight) Fetal, Trans-rectal, Trans-vaginal, Peripheral vessel, Urology

### **Phased Array**



EV3-10T 粩

Fetal, Trans-rectal,

Trans-vaginal,

Endocavity (curved)

Peripheral vessel, Urology

P1-5CT SP3-8T C-Architecture (PowerView<sup>™</sup>) Single crystal phased array phased array Fetal, Abdominal, Pediatric, Neonatal cephalic. Fetal, Abdominal, Pediatric, Adult cephalic, Cardiac, Adult cephalic, Cardiac Peripheral vessel

CW5.0 Pencil typed Cardiac



## **Pencil Typed**



CW2.0 Pencil typed Cardiac

Everlasting productivity

# **Real-time customer service**

### **High Quality Transducers**

Alpinion has developed its own transducers to manufacture in its own facilities. These ergonomically designed products use lightweight and flexible cables to reduce user fatigue. The durable connectors and sturdy exterior materials are designed to ensure convenience and durability in any environment. Furthermore, Alpinion operates its own maintenance and warranty service teams to promptly respond to customer requests.