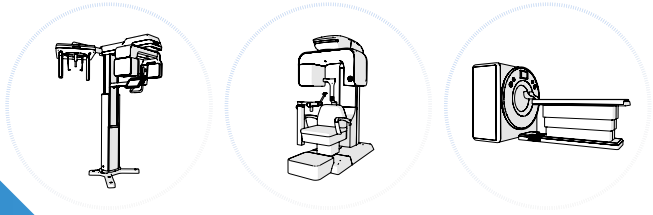
LARGEV

PRODUCTS CATALOG

CONE BEAM COMPUTED TOMOGRAPHY



Smart3D-X P2-5

HiRes3D P6-9

Ultra3D P10-13

SmartVPro P14-15

CephPro3D P16-17

About LargeV P18-19

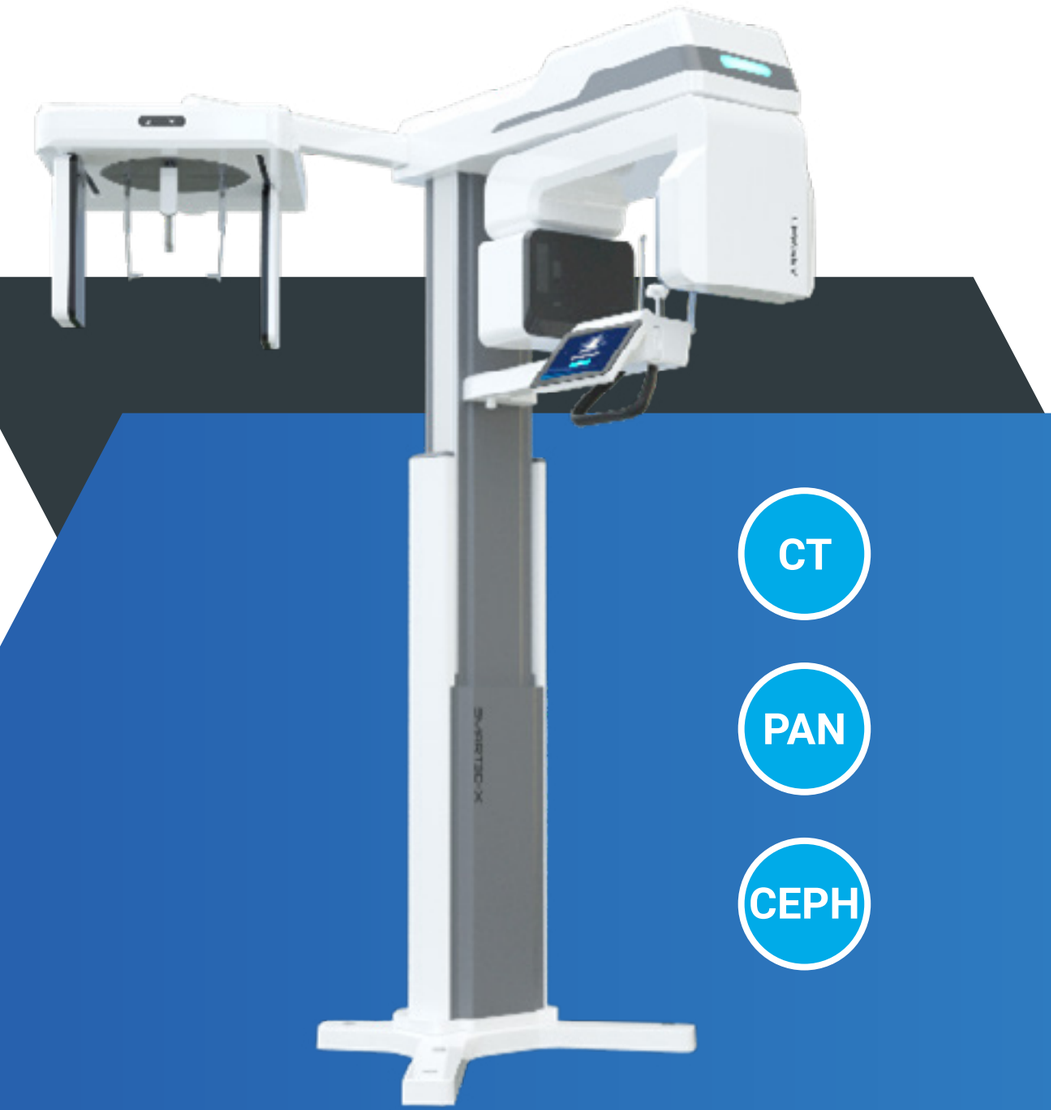
LargeV Milestone P20-21





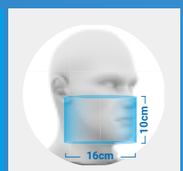
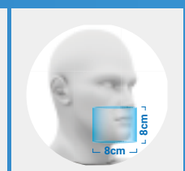
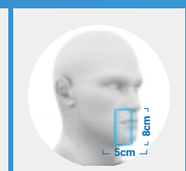
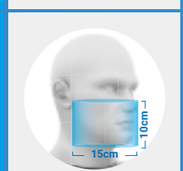
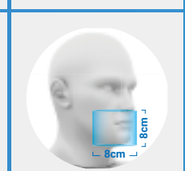
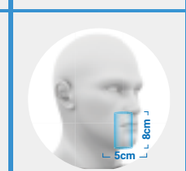
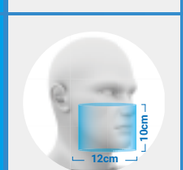
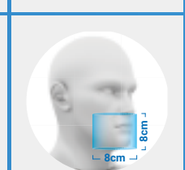
Smart3D-X

3-IN-1 MULTIFUNCTIONAL DENTAL CBCT



3-IN-1 CBCT

- Extraordinary Image.
- High resolution ≥ 2.2 lp/mm, Voxel size 0.05-0.25mm.
- Enhanced image by Small Focal Spot X-ray Tube.
- Panoramic image reconstructed from 3D image data.
- Cephalometric PA/LATERAL & Carpus shot for orthodontic treatment.
- Image slice for implanting.
- 360°scan and 800 frame images with unique CT algorithms.
- Multi-layer Autofocus Function in panoramic imaging, fitting the patient's dental arch.
- Six positioning lasers with face-to-face communication for precise positioning.

Optional 1			
Optional 2			
Optional 3			

Clinical Applications



Panoramic image reconstructed from 3D image data



CEPH LAT(full)



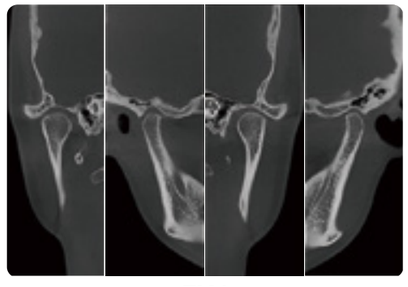
CEPH LAT(half)



CEPH PA



PAN



TMJ



Carpus image

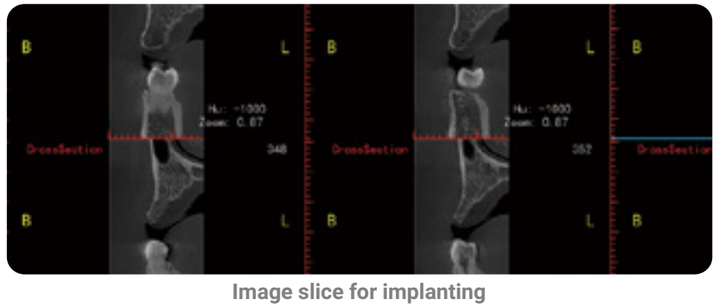
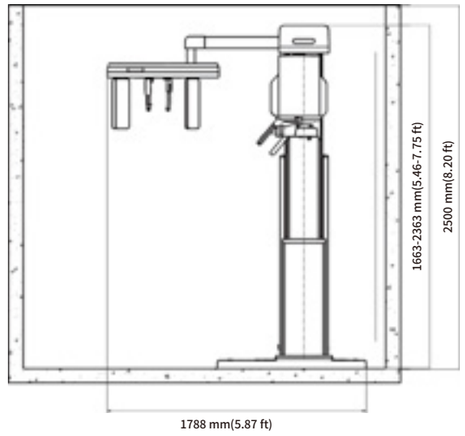


Image slice for implanting

Technical specifications

Field of View (cm×cm)	Φ 12×10 Φ 8×8 Φ 5×8	Φ 15×10 Φ 8×8 Φ 5×8	Φ 16×10 Φ 8×8 Φ 5×8
Detector Type	CT/PAN: CsI + TFT CEPH: CsI + CMOS		
Tube Voltage	CT/PAN/CEPH :	60-100 kV	
Tube Current	CT/PAN/CEPH :	2-10 mA	
Exposure Time	CT:	9.5 s / 12.5 s / 18.5 s	
	PAN :	8.1 s / 18 s	
	CEPH :	7.5 s / 10.1 s / 11.8 s	
Focal Spot Size	CT/PAN/CEPH :	0.5 (IEC60336)	
Spatial Resolution	≥2.0 lp/mm		
Reconstruction Time	<60 s		
Voxel Size	0.05-0.25 mm		
Weight	220 kg (485.02 lb)		

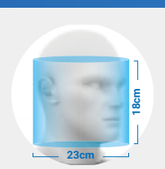
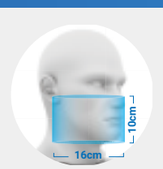
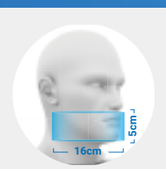
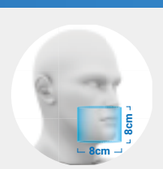
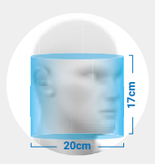
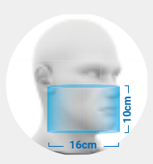
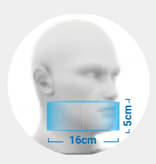
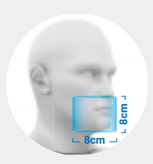
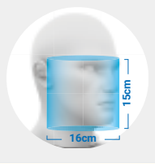
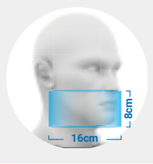
Dimensions



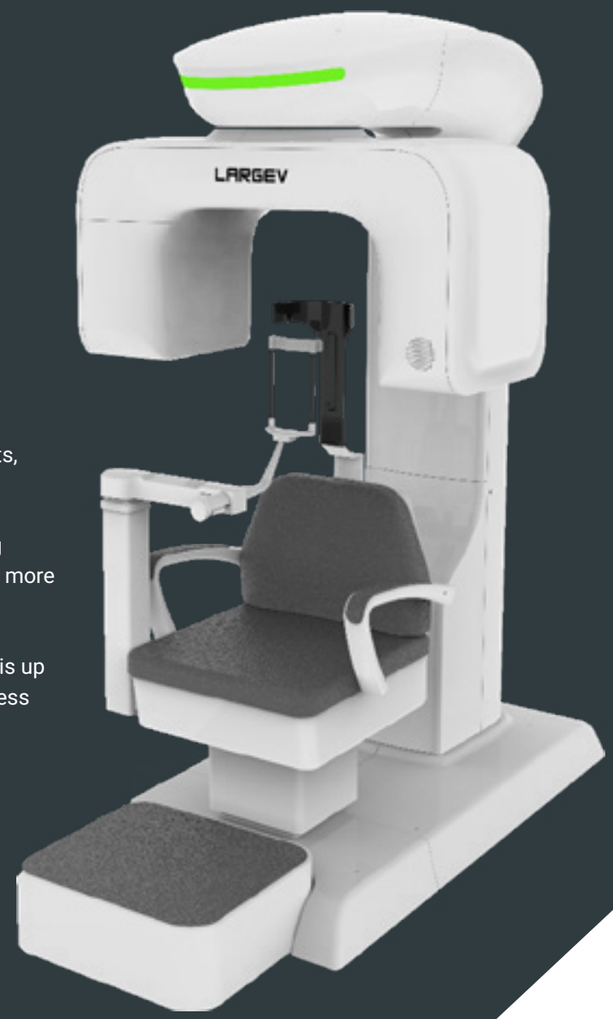
HiRes3D Series
PROFESSIONAL DENTAL CBCT

HD Resolution
- The highest resolution reaches 2.6 lp/mm and the microstructure of the oral cavity can be seen
- The voxel size is 0.05-0.3mm optional
- Enhanced image by small focal spot X-ray tube
- Detector equipped with HD pixels, high sensitivity and high image acquisition rate
- High-performance AI reconstruction algorithms promote the images to be more precise and faster

CT / PAN(Reconstruction) / CEPH(Reconstruction)
- 360° scan
- Small focal spot X-ray tube and high sensitivity detector for high-definition images
- S/M/L three shooting modes are optional to respond to the different patients' needs
- Rapid reconstruction of high-definition images within 30 seconds
- Super large FOV with no stitching
- Panoramic images generated automatically
- Cephalometric PA and LAT generated automatically

HiRes3D-Max				
HiRes3D-Plus				
HiRes3D				

SIX DIMENSIONAL POWER SEAT



Effectively reduce motion artifacts, resulting in clearer images

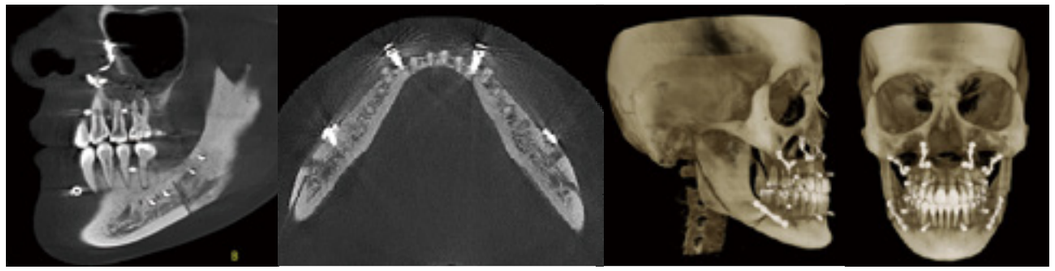
Bring patients a relaxed scanning experience, more convenient and more comfortable

The movement control precision is up to 0.1mm, which makes the process faster and more stable

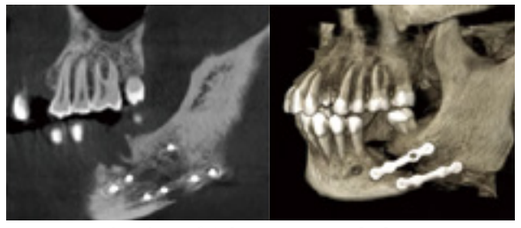
Clinical Apllications



Orthodontic



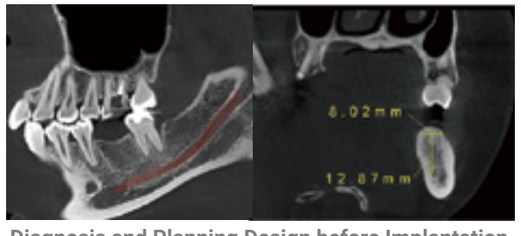
Orthognathic Examination



Examination of Odontoma Amebolastoma



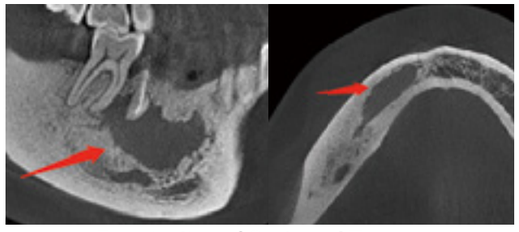
Positioning of Impacted and Supernumerary Tooth



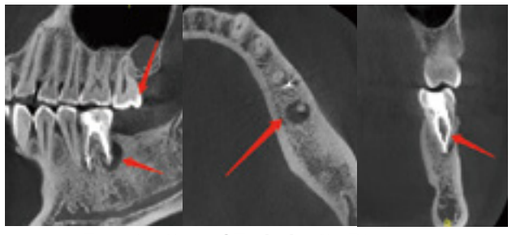
Diagnosis and Planning Design before Implantation



Evaluation after Implantation



Examination of Cysts and Tumors

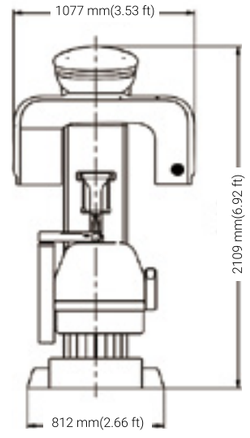


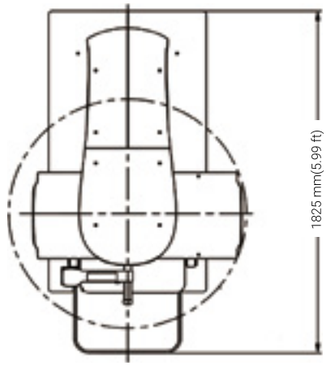
Examination of Endodontic Diseases

Technical specifications

Model	HiRes3D	HiRes3D-Plus	HiRes3D-Max
Field of View (cm x cm)	Φ 16×15 Φ 16×8 Φ 8×8 Φ 5×8	Φ 20×17 Φ 16×10 Φ 16×5 Φ 8×8	Φ 23×18 Φ 16×10 Φ 16×5 Φ 8×8
Voxel Size (mm)	0.25 0.25 / 0.125 0.125 / 0.0625 0.1 / 0.05	0.3 0.25 / 0.125 0.2 / 0.1 0.125 / 0.0625	0.3 / 0.15 0.25 / 0.125 0.2 / 0.1 0.125 / 0.0625
Spatial Resolution	2.6 lp/mm	2.4 lp/mm	2.2 lp/mm
Reconstruction Time	≤ 30 s	≤ 40 s	≤ 40 s
Tube Current (mA)	min: 2 max: 10 (60 kV)		
Tube Voltage (kV)	min: 60 max: 100 (6 mA)		
Scan Time	25 / 12.5 / 15.625 / 18.75 (s)		12.5 / 12.5 / 15.625 / 18.75 (s)
Focal Spot Size	0.5 (IEC60336)		
Sensor Type	CMOS Flat Panel Detector	α-Si Flat Panel Detector	
Sensor Size	13 cm x 13 cm	16 cm x 16 cm	26 cm × 21 cm
Weight	340 kg (749.57 lb)		
Packing Size	Case 1: L,1930 × W,800 × H,1300 mm (6.33 × 2.62 × 4.27 ft) 304 kg (888.46 lb) Case 2: L,1970 × W,1270 × H,1170 mm (6.46 × 4.17 × 3.84 ft) 290 kg (639.34 lb)		

Dimensions





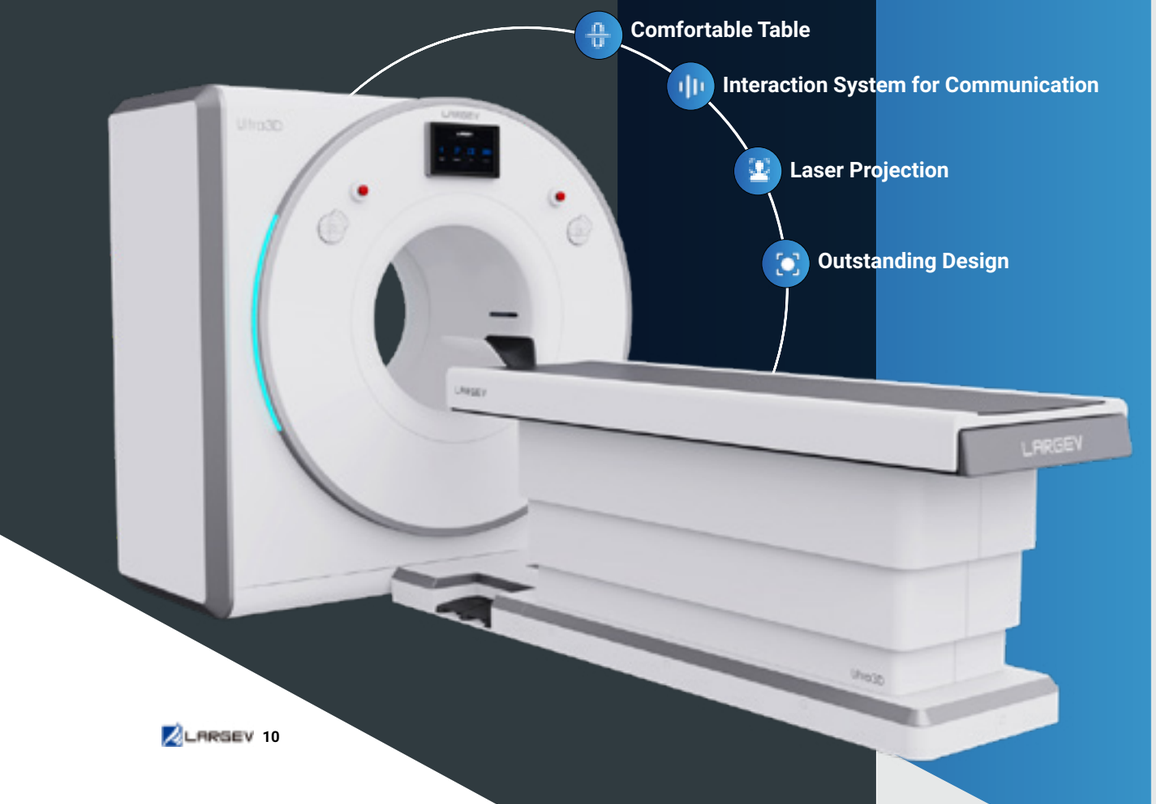
Ultra3D
DUAL-SOURCE ENT CBCT

Extraodinary image quality
- It provides to a ten-micron class definition, body construction with 50μm can be detected easily, for in-depth diagnostic.

Starry sky detector
- Equipped with high resolution, high sensitivity, high image acquisition rate, and a low power consumption core.

0.25 Small focal spot x-ray tube
- Core technology for improving resolution and SNR.





reddot design award

Ultra3D won the Red Dot Design Award 2022

DUAL-SOURCE & DUAL-DETECTOR CBCT SYSTEM
Using a dual-source generator and dual-detector design, Ultra3D contributes to a dual-system with wide-angle imaging and microscopic imaging that can provide micron-scale imaging solutions for ENT and dental clinical diagnosis.

PRE-SHOT POSITIONING SYSTEM
Ultra3D captures a large area with 2D image after will be selected small area for 3D shooting, it will automatically direct the patient to the correct position with easy manipulation.

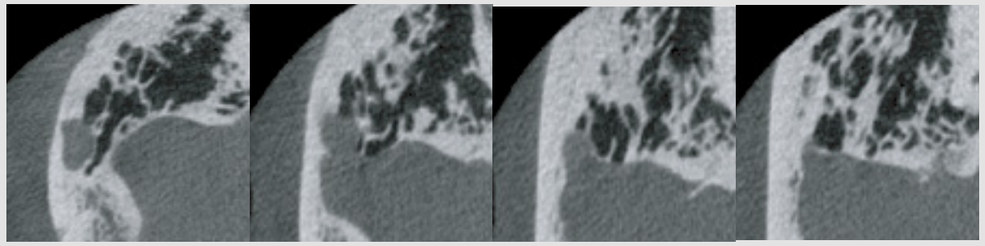
LOW DOSE CONTROL
It fully explores the perfect balance between image quality and radiation dose. Low dose mode provides lower radiation especially for children and elders, that eliminates the risk of exposing the patient to an unnecessarily high dose by automatically adapting radiation levels.

THREE SUPPORTIVE ALGORITHMS
- HD RECONSTRUCTION
- SCATTER CORRECTION
- METAL ARTIFACT CORRECTION

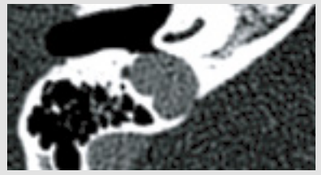


Clinical Applications

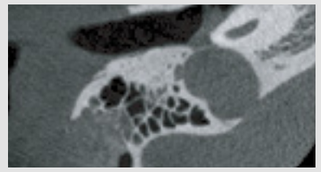
Pulsatile Tinnitus



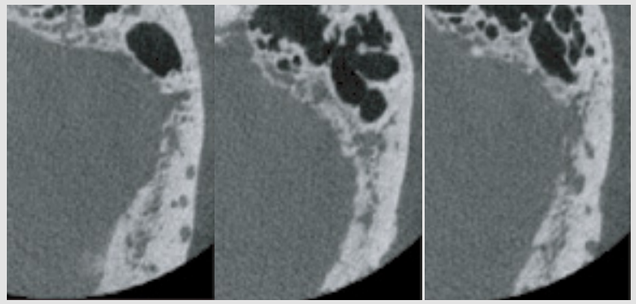
Ultra3D clearly shows the diverticulum missing.



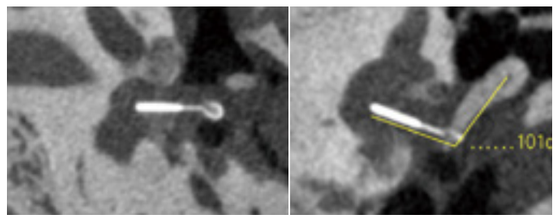
Before surgery



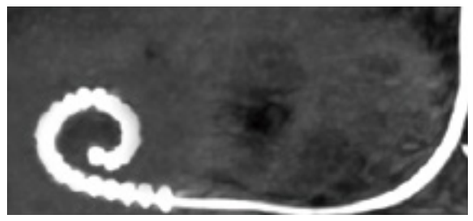
After surgery



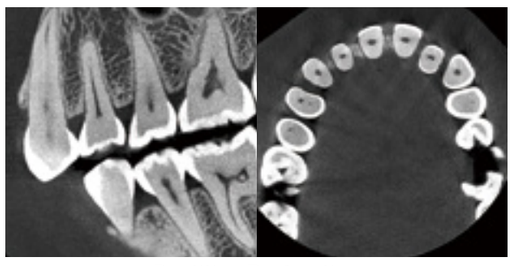
Ultra3D shows dural arteriovenous fistula vascular branch.



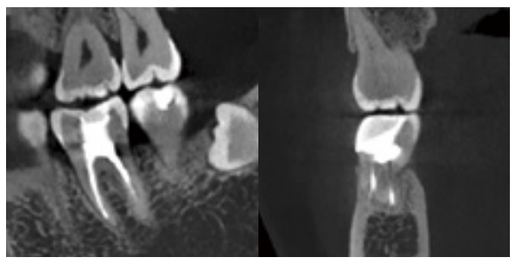
Artificial Auditory Ossicle Implantation



Cochlear Implant Surgery



Dentition Restoration

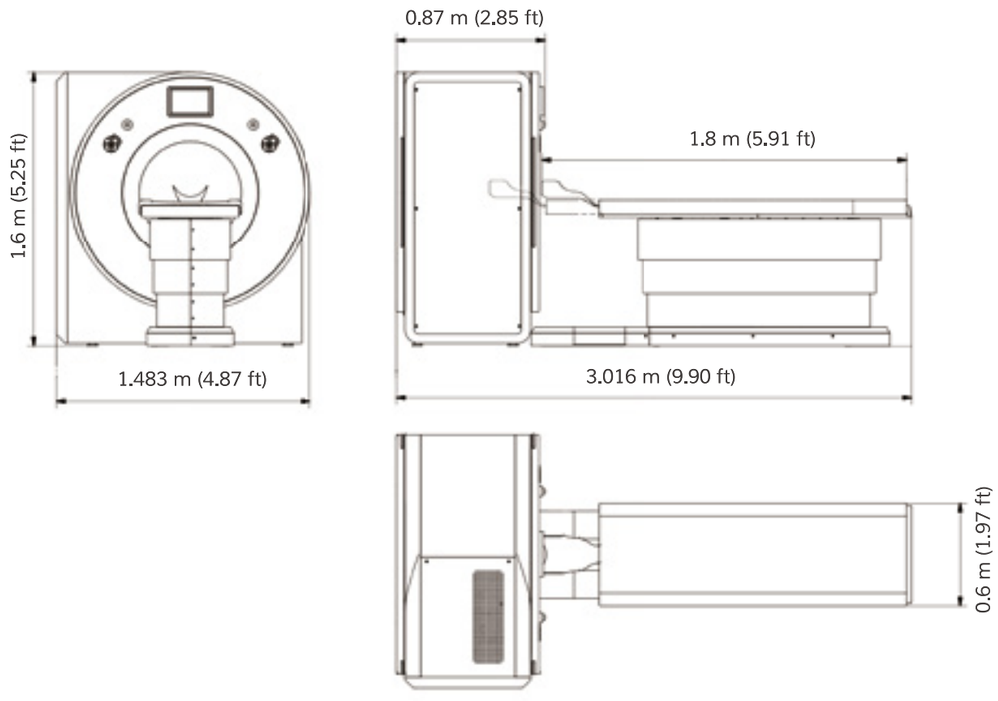


Dentition Restoration

Technical specifications

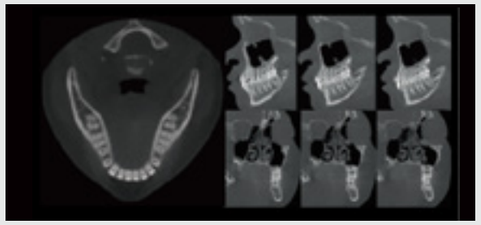
Field of View (cm x cm)	Φ 23×19 Φ 16×13 Φ 16×6 Φ 8×8 Φ 7×4
Weight	920 kg (2028.25 lb)
Product Dimension	3.016 m (L, 9.90 ft)×1.483 m (W, 4.87 ft)
Height	1.6 m (5.25 ft)

Dimensions



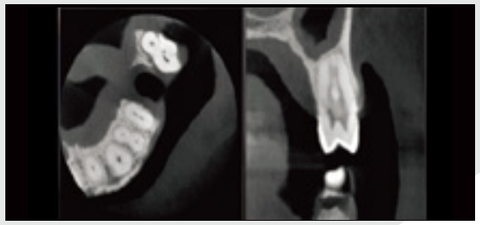
SmartVPro

DENTAL RADIOLOGY SOFTWARE



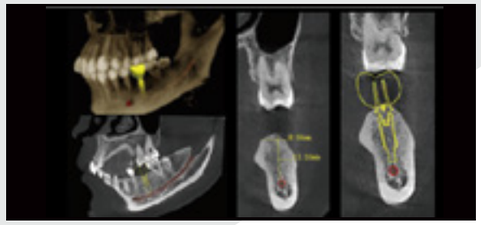
Multiple Planar Reconstruction

Axial, coronal and sagittal slices can be observed simultaneously. Besides, the slice in any direction is available. Buccolingual slices, distal and mesial sections were obtained to facilitate diagnosis.



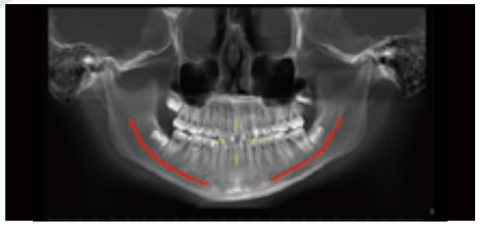
3D Fine Reconstruction

The smallest voxel size reaches 0.05 mm, which is more suitable for the diagnosis of dental pulp disease.



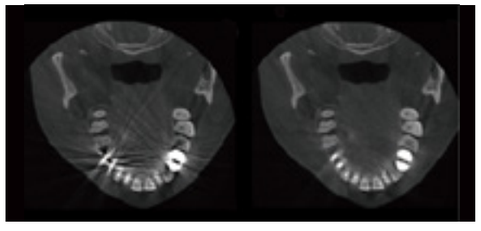
Implant Simulation

It can evaluate the bone quality and bone quantity of the implant area, automatically outline the neural tube. Clarifying the relationship between the implant position and the adjacent anatomical structure to accurately select the implant position, the optimal length and diameter of the implant. It can improve the success rate, and avoid possible nerve or blood vessel damage.



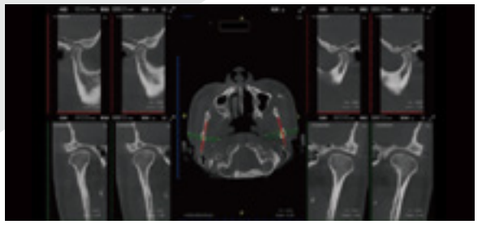
AI+Nerve

This function can locate the shape of the inferior alveolar nerve in 3D space, as well as the positional relationship between the relative alveolar bone wall, adjacent teeth, and implants, providing a reference for doctors, greatly improving work efficiency and reducing surgical risks.



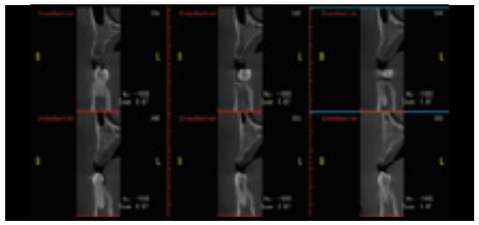
Metal Artifact Correction

With the new T-MAR correction module for metal artifact removal, the system corrects metal artifacts intelligently. It avoids overmodification and saves the original clinical data.



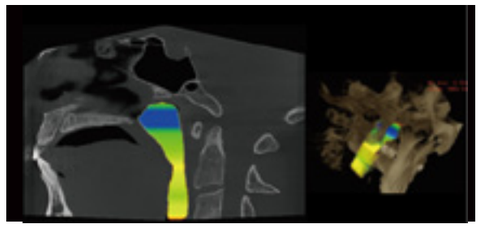
TMJ Diagnosis

The left and right temporomandibular joint contrast display mode is adopted. The cross positioning line can be automatically positioned at the temporomandibular joint, which is convenient for dentists to evaluate temporomandibular joint diseases.



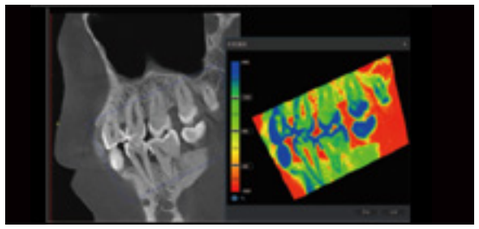
Implant Segmentation

Clear, comprehensive,and continuous evaluation of overall osseointegration around the implant, allowing observation of the surrounding bone quality around the impant



Airway Measurement

The airway is segmented automatically, which calculates the volume and the narrowest area of the airway.



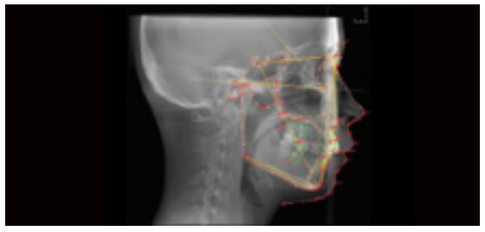
Density Measurement

Visual assessment of bone quality, bringing greater convenience to dentists



Automatic Head Position Correction

Not only enhancing the accuracy and reliability of the images,generating more precise cephalometric images, but also enabling comparative analysis of results from different scanning time.



CEPH Measurement(Optional)

The neural network is trained by mega data, which automatically identifies orthodontic anatomical landmark points, draws anatomical structures and outputs measurement reports according to the selected measurement methods.

CephPro3D
ORTHODONTIC SOFTWARE

1 Orthodontic Case Report

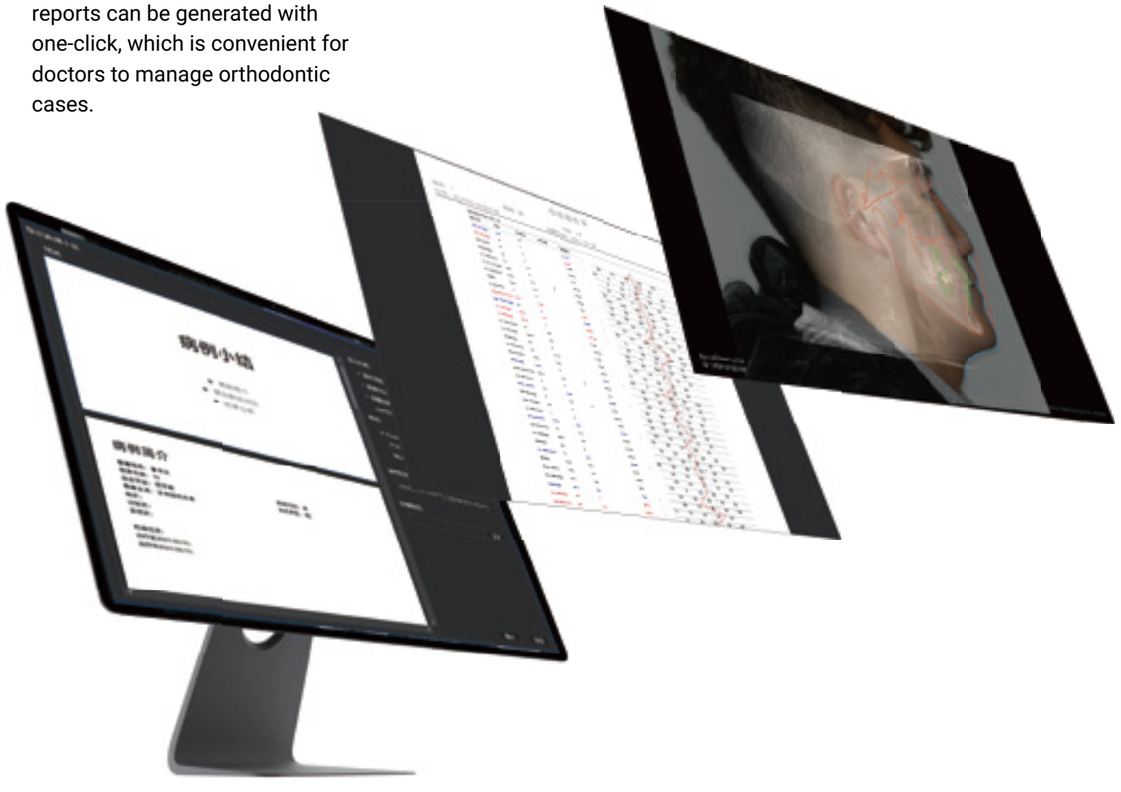
It integrates the basic information of the patients with oral and facial photos at different stages of treatment. Meanwhile, patients´ eyes can be covered automatically, which protects their privacy. Case reports can be generated with one-click, which is convenient for doctors to manage orthodontic cases.

2 Visual Presentation of Report with the Clear Measurement Effect

The report is generated with just one-click. It promotes communication between doctors and patients.

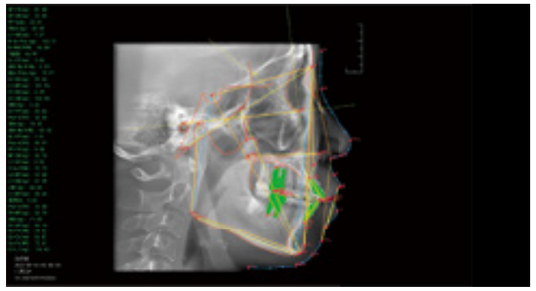
3 VTO

CephPro3D superimposes patient´s cephalic images with side photos. It can be fine-tuned through the anchor point to ensure that the image and photos are superimposed completely. Intuitive simulation of the orthodontic effect is generated by one-click.



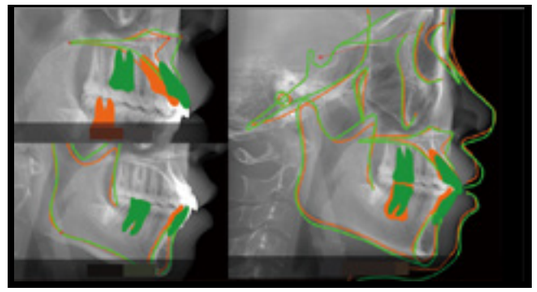
4 Customizing Measurement Analysis Methods

There are 19 built-in cephalometric measurement methods, 135 measurement items, and 73 measurement points in the software . Dentists can choose the corresponding measurement method according to the diagnostic demands, and provide patients with professional cephalometric measurement reference.



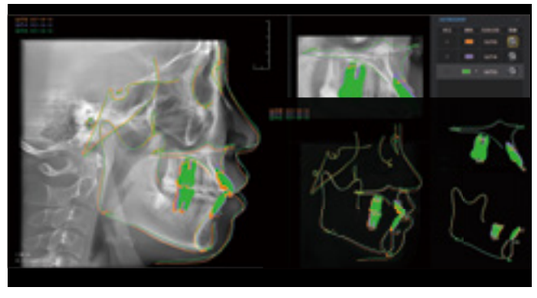
5 Convenient Comparison

The software is equipped with an overlay interface, allowing simultaneous review of cephalometric and panoramic images, and treatment comparisons before and after orthodontic treatment for the same patient. The overlay process enables a review of the alignment with American Board of Orthodontic (ABO) standard.



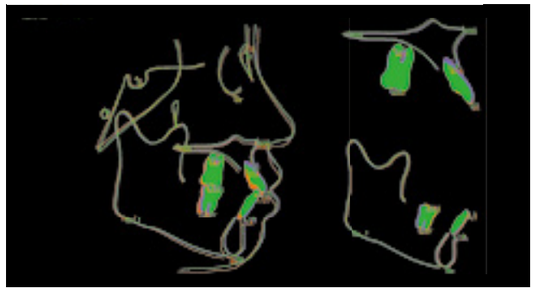
6 Intelligent Tracking of Treatment Stage

The AI cephalometric measurement and manual drawing function can be combined with the patient's historical records to fine-tune the pre-treatment region curves. During and after treatment, the pre-treatment curves can be directly imported, and the tracing images can be easily adjusted, facilitating efficient and swift diagnosis for doctors.



7 Intelligent Export

The system allows for direct export of cephalometric tracing images and overlay diagrams without background images, which can be easily shared by dentists in reports.



LARGEV

LargeV Instrument Corp., Ltd. was founded in 2011 and committed to the development and industrialization of high-end medical devices. The core team of LargeV was graduated from Tsinghua University and has a solid foundation in the technical fields of computed tomography, radiation protection, and image processing. We insist on a customer-centric business philosophy and focus on innovation and excellence.

Our mission: Provide doctors and patients with superior products and services.
Our vision: Be the world's leading manufacturer of medical equipment.

LARGEV
MILESTONE



2011 LargeV Instrument Corp., Ltd. was founded on March 11.

2012 HiRes3D, the first seated Chinese CBCT model, was approved to enter the market.

2013 Passed TüV ISO13485 quality management system certification and CE certification. Achieved the title of“ National High-tech Enterprise.”

2015 Awarded the first level prize of “Technological Invention” by the Chinese Society for Stereology Science and Technology. The first Chinese CBCT debuted at the International Dental Show (IDS) in Cologne, Germany.

2016 The Multifunction Dental CBCT Smart3D was granted certification from NMPA.

2017 HiRes3D-Plus and HiRes3D-Max, professional dental CBCT models with super-large FOV were certified by NMPA.

2018 Awarded with “Edgy Technology Enterprise” by Beijing Pharmaceutical Profession Association and selected as “Zhongguancun Pioneering Technology Enterprise.”

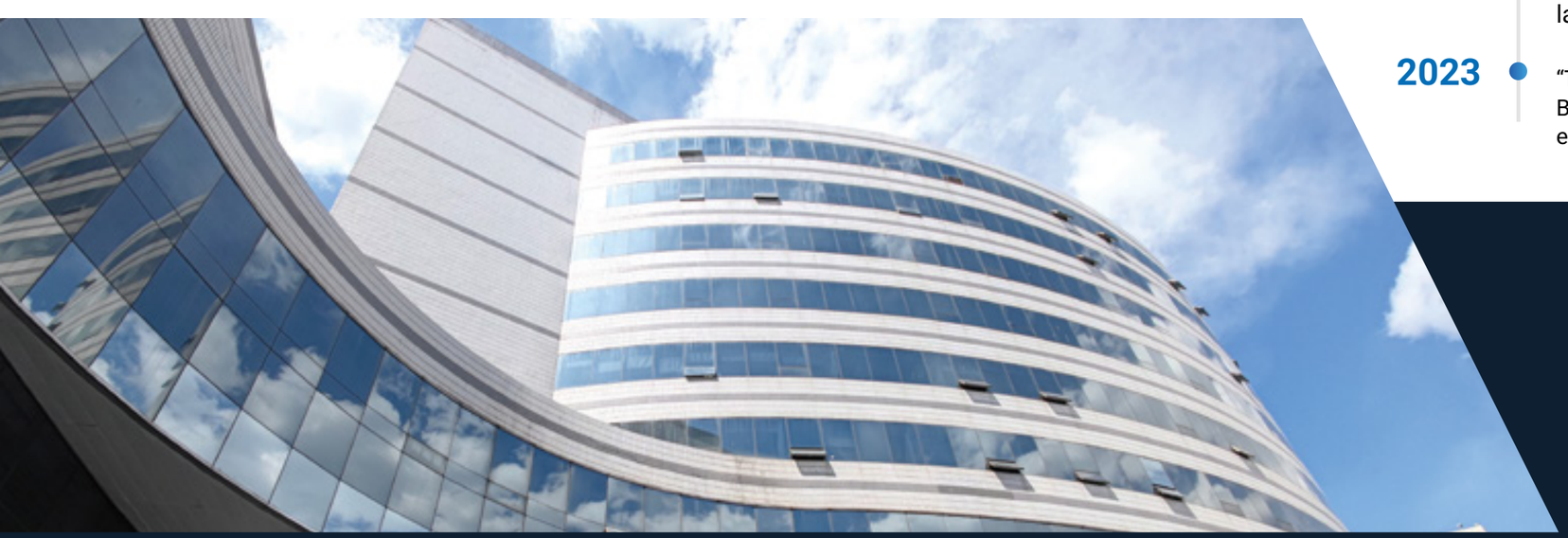
2019 SmartVPro, the first professional dental CBCT radiology software in China, was certified by NMPA. CephPro3D, the first dental cephalometric analysis software, was certified by NMPA.

2020 Zhejiang LargeV Instrument Corp., Ltd. was put into operation.

2021 Smart3D-X won the German iF Design Award.

2022 Ultra3D, the world’s first CBCT with dual-source and dual-detector was launched. Ultra3D has won the Red Dot Design Award.

2023 “The Joint R&D Engineering Center of Intelligent Orthodontics”formed with Beijing Stomatological Hospital, Capital Medical University was formally established.



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