

# 3D Accuitomo 170



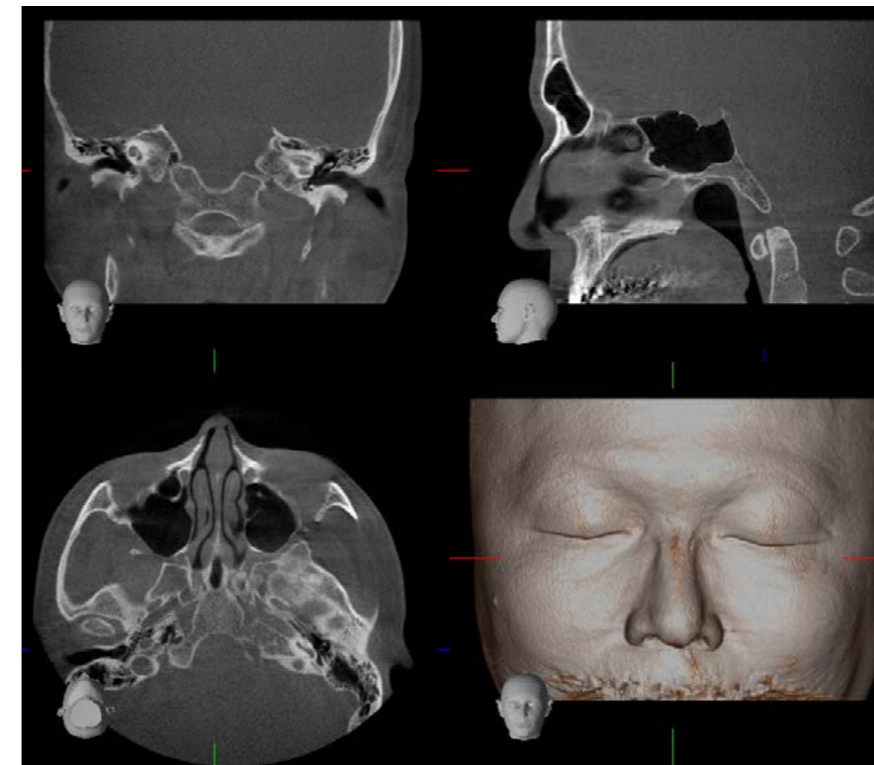
# 3D Accuitomo



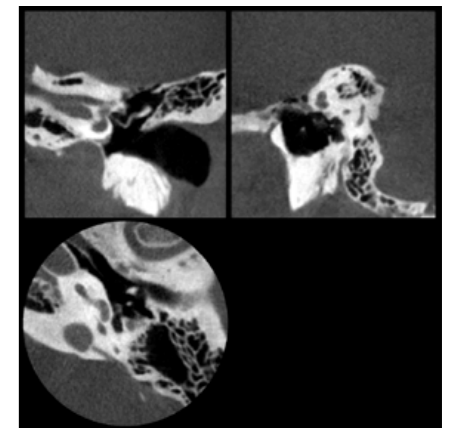
3D Accuitomo 170

## 80 $\mu\text{m}$ for unsurpassed image clarity

The 3D Accuitomo offers unsurpassed high resolution images with wide fields of view. Its super-fine minimal voxel size of just 80  $\mu\text{m}$  allows diagnosing even the most subtle details of the temporal bone, nasal cavities, paranasal sinuses, mandible, and teeth.



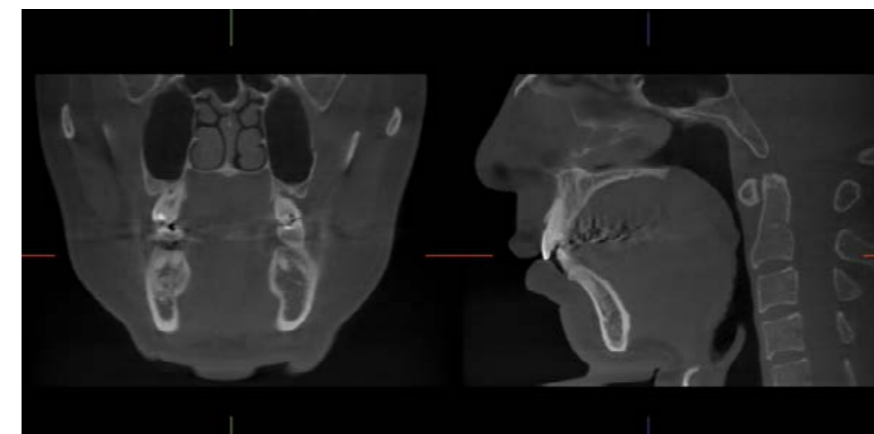
$\text{\O}170 \times \text{H } 120 \text{ mm (250 } \mu\text{m)}$



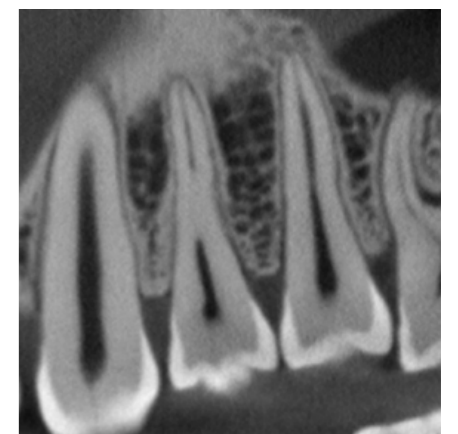
$\text{\O}40 \times \text{H } 40 \text{ mm (80 } \mu\text{m)}$

## Unsurpassed high resolution image with minimal voxel size of 80 $\mu\text{m}$

The minimum voxel size of 80  $\mu\text{m}$  ensures clear, high resolution images even when magnified.



$\text{\O}170 \times \text{H } 120 \text{ mm (250 } \mu\text{m)}$



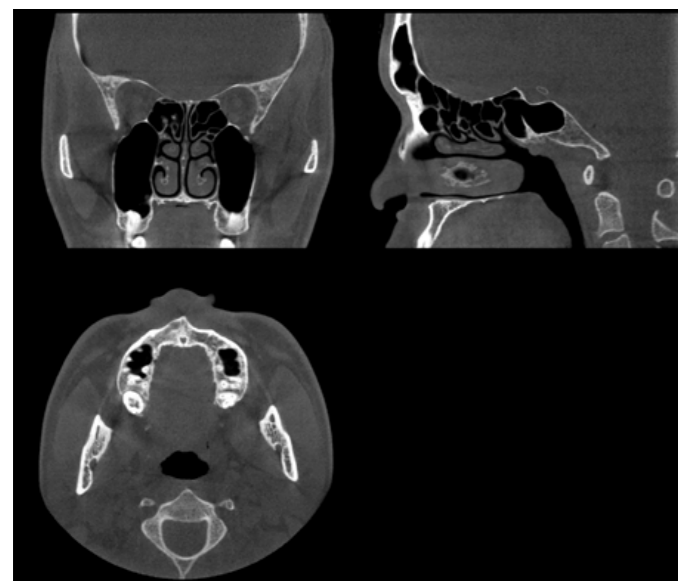
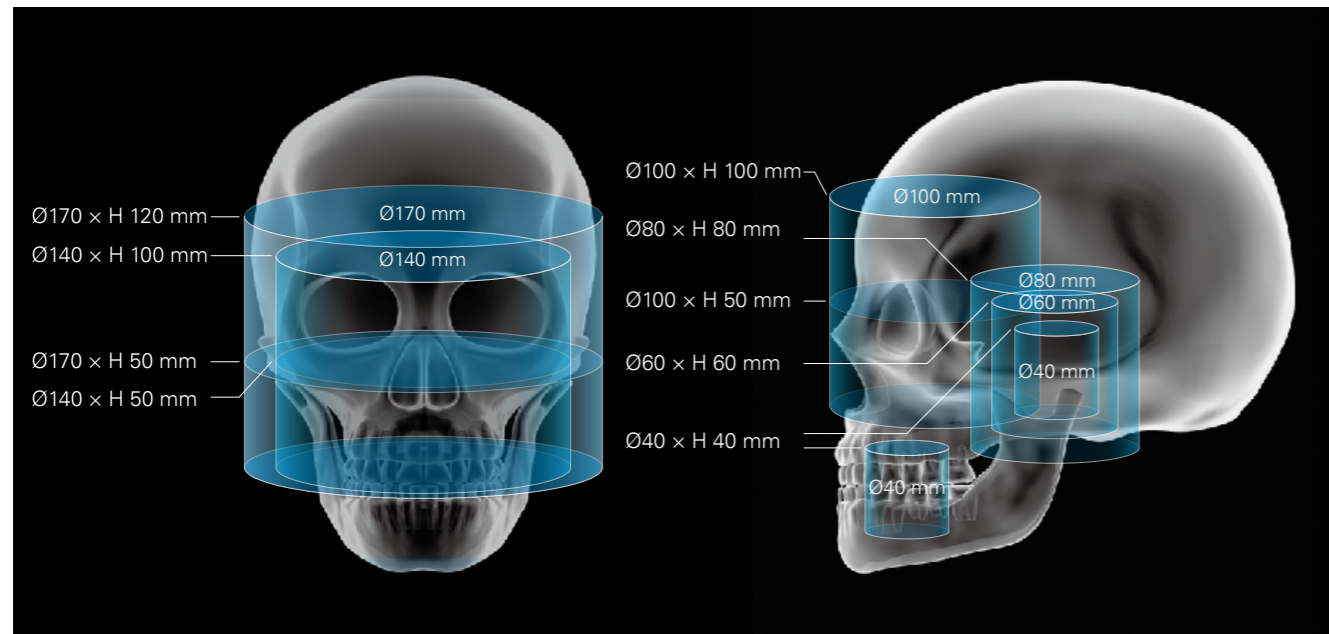
High Resolution Mode (80  $\mu\text{m}$ )

# Various Fields of View

## 9 fields of view for flexible scanning from local to large areas

The 3D Accuitomo is equipped with 9 FOVs (fields of view) that allows flexibility when scanning patients with a variety of diagnostic needs and clinical indications, from a large area (Ø170 × H 230 mm) that covers the maxillofacial region to a local area (Ø40 × H 40 mm).

Reducing exposure dose is possible by selecting the most suitable FOV.



Standard Mode Ø170 mm × H 120 mm

Fields of View

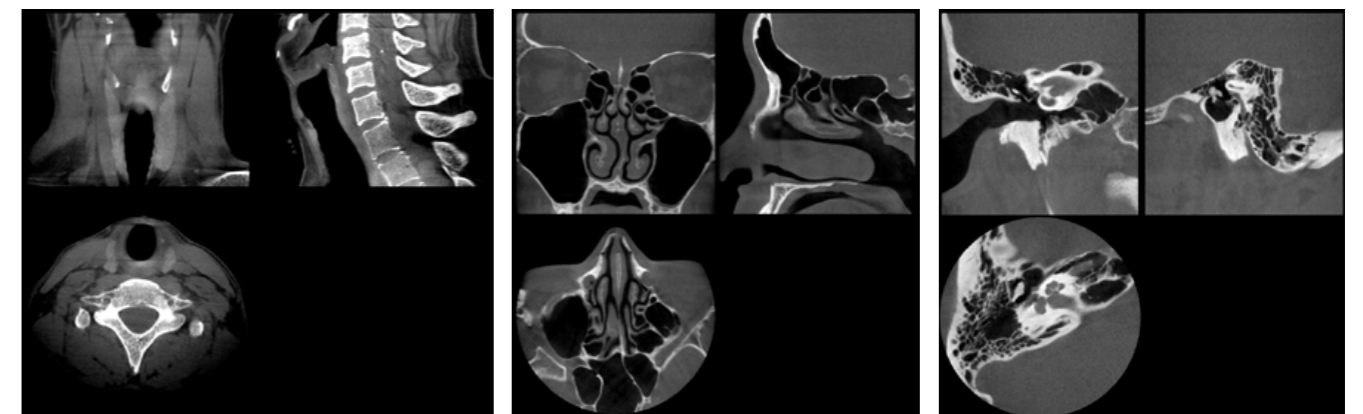
FOV	Voxel Size
Ø40 × H 40 mm	80 µm
Ø60 × H 60 mm	100 µm
Ø80 × H 80 mm	125 µm
Ø100 × H 50 mm	160 µm
Ø100 × H 100 mm	
Ø140 × H 50 mm	200 µm
Ø140 × H 100 mm	
Ø170 × H 50 mm	250 µm
Ø170 × H 120 mm	

## High resolution even at large FOVs

The minimum voxel size can be selected from 80 µm, 100 µm, 125 µm, 200 µm, or 250 µm depending on your diagnostic needs and clinical indications.

The 3D Accuitomo is able to provide high resolution with less distortion, even at large FOVs.

FOV can be offset so that even the temporal bone region can be positioned at the center of the FOV. This results in well-focused, high resolution images.



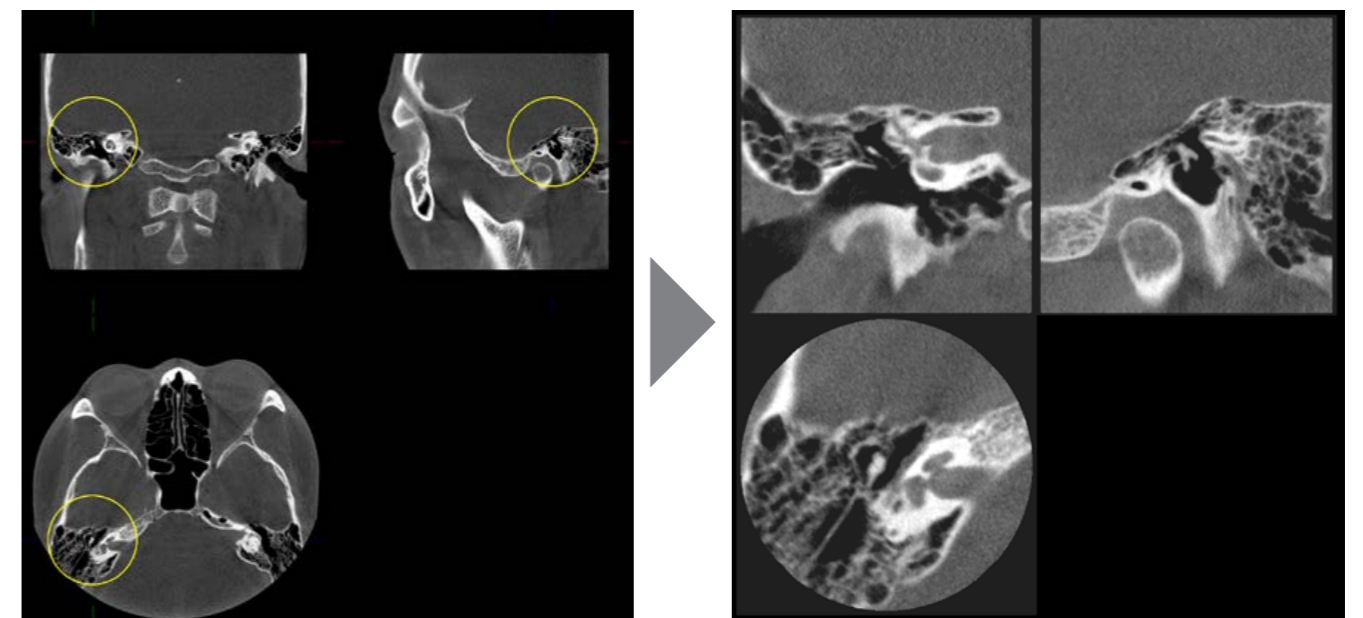
Ø140 × H 100 mm (200 µm)

Ø100 × H 100 mm (160 µm)

Ø60 × H 60 mm (100 µm)

## Zoom reconstruction from original data

The 3D Accuitomo is equipped with a unique zoom reconstruction function allowing you to zoom in and reconstruct a new volume from the original scan, without the need for additional acquisitions. The new volume can be reconstructed with a resolution of up to 80µm improving diagnostic accuracy with no additional X-ray exposure to the patient.



Ø170 × H 120 mm (250 µm)

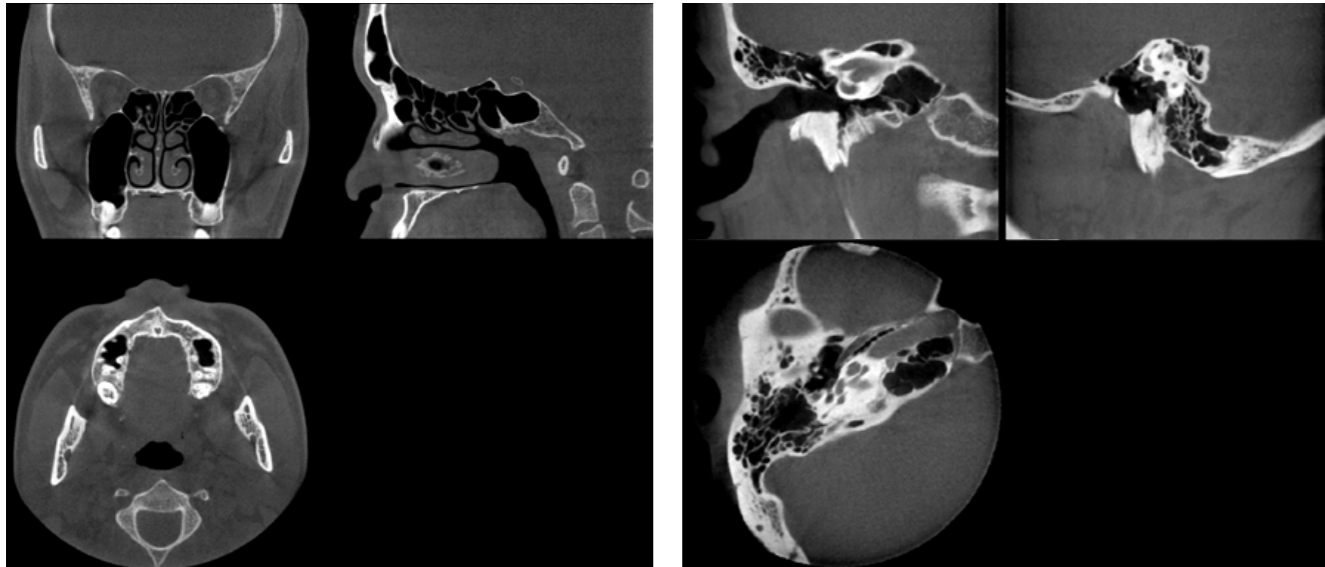
Ø40 × H 40 mm (80 µm)



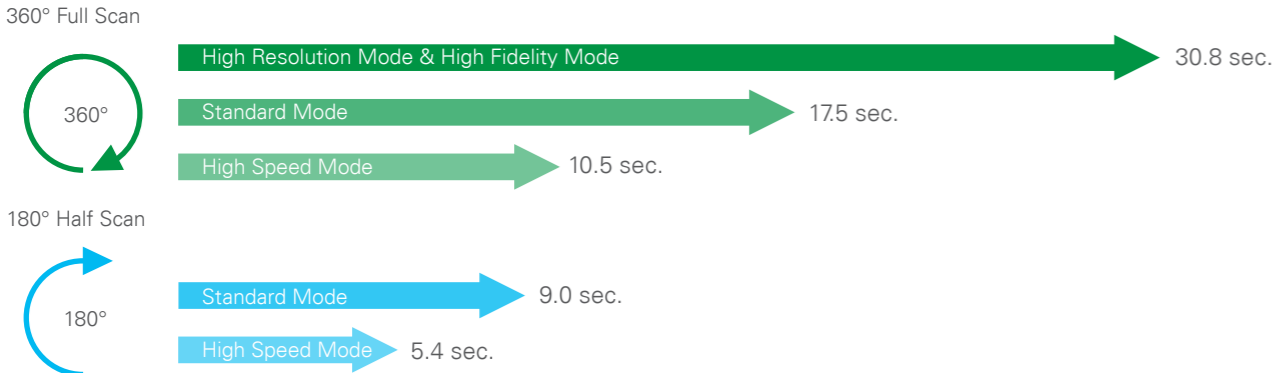
# Adaptable Acquisition Modes

## Four exposure modes, from high resolution to high speed

- High Resolution(Hi-Res) Mode : Pixel size of the flat-panel detector is 1/4 compared to standard mode. This mode has the best spatial resolution.
- High Fidelity(Hi-Fi) Mode : Higher data density for clearer image than standard mode. This mode is suitable for the zoom reconstruction function.
- Standard(Std) Mode : Suitable for all applications; from local to large area such as temporal bone, nasal cavity, jawbone, teeth.
- High Speed (Hi-Speed) Mode : This helps reduce motion artifacts during the scan. Suitable for patients such as children who have difficulty controlling movements.



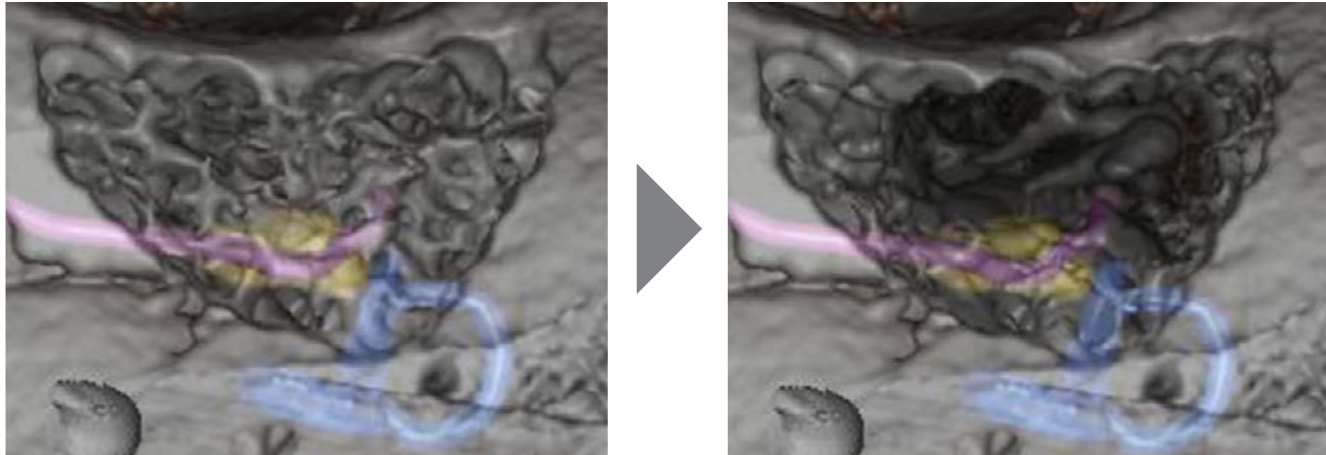
	360° Full Scan	180° Half Scan
High Resolution (Hi-Res) Mode*	30.8 sec.	15.8 sec.
High Fidelity (Hi-Fi) Mode*	30.8 sec.	15.8 sec.
Standard (Std) Mode	17.5 sec.	9.0 sec.
High Speed (Hi-Speed) Mode	10.5 sec.	5.4 sec.



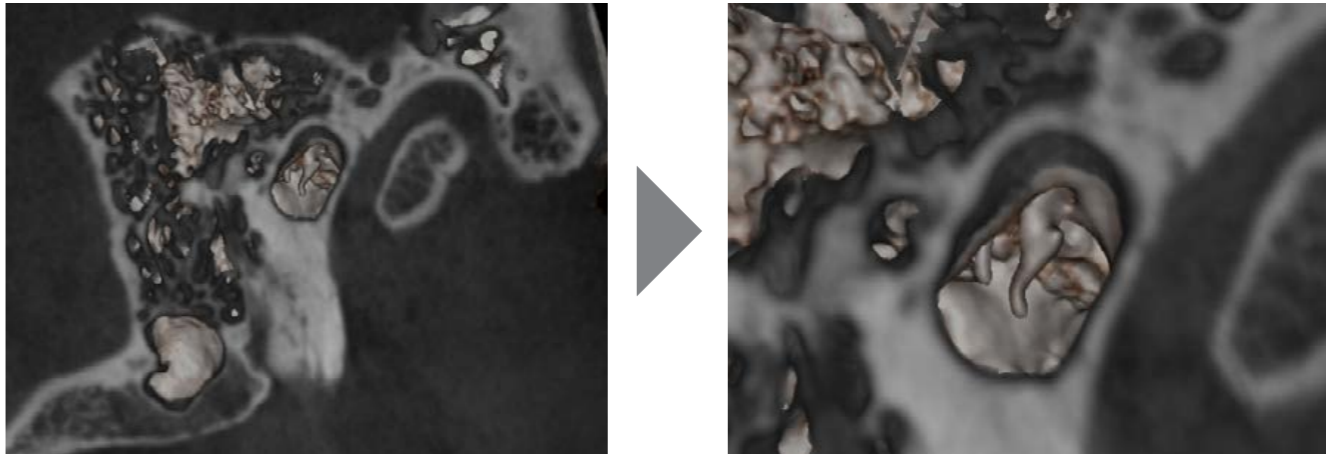
\*High resolution mode and high speed mode are only available for Ø40 x H 40 mm and Ø60 x H 60 mm FOVs.

## Fulfilling supportive functions for clinical practices

The 3D Accuitomo is equipped with an application that has various functions that allow simulations within volume rendering.

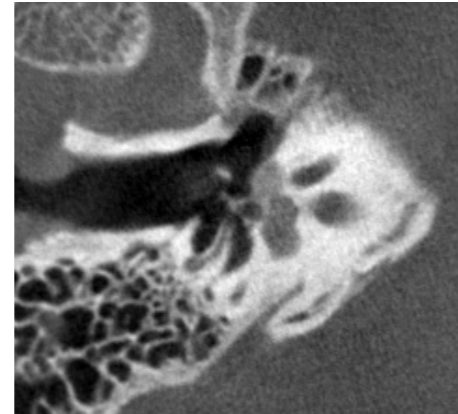
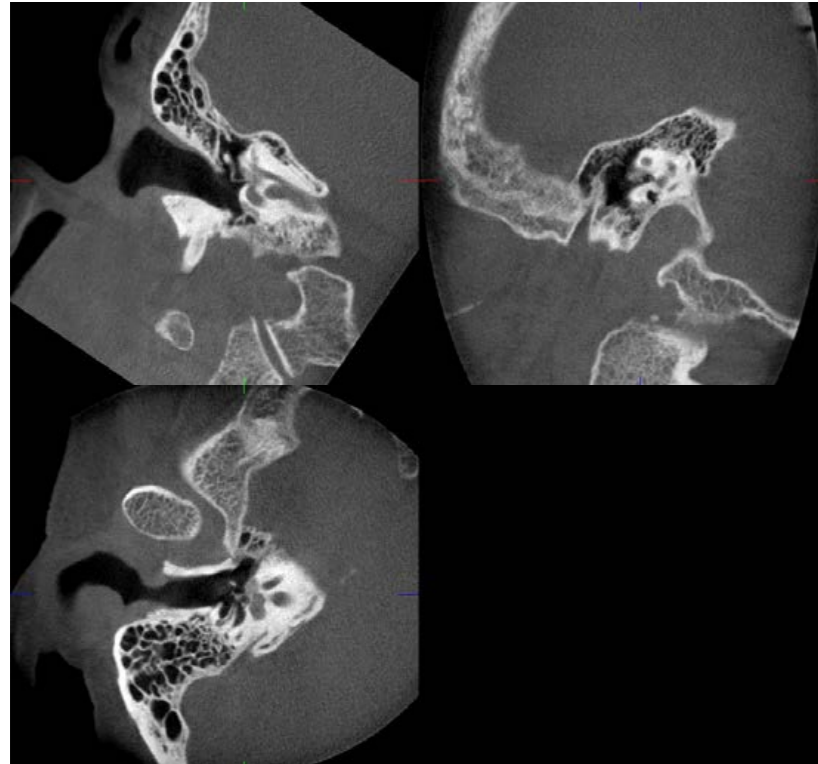


Mastoidectomy Mode (neural tubes drawing and CT volume removing)



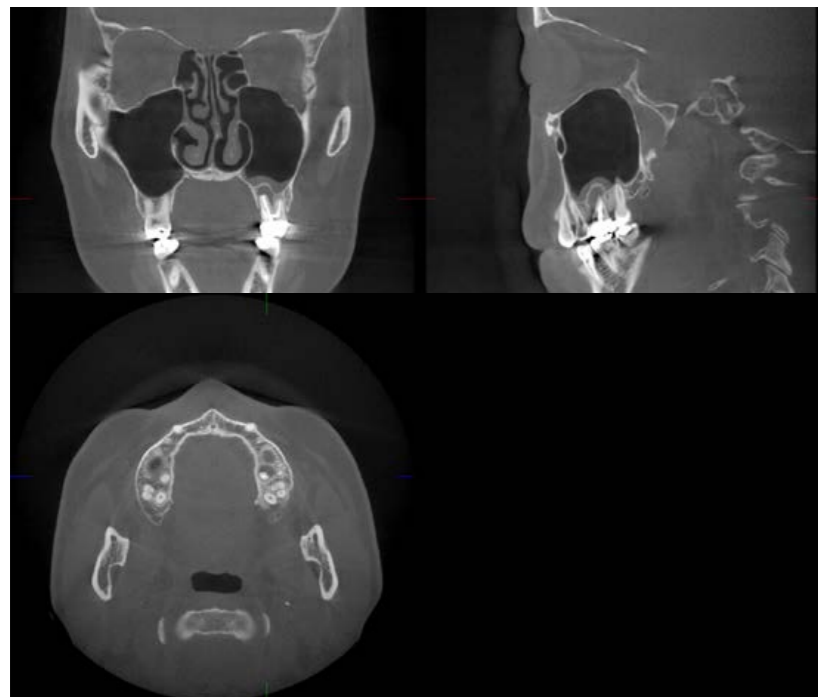
Pseudo Rigid Scope Mode (perspective projection)

# Case Example 1



**Case: Otosclerosis**  
 The otospongiotic lesion is detected around the anterior oval window (fissula ante fenestram). MPR images created in the planes parallel to the stapes superstructure clearly show the positional relationship between the stapes and the otosclerotic lesion.

Image Courtesy: Kawano Ear Surge Clinic



**Case: Odontogenic maxillary sinusitis**  
 Here is a high-resolution CBCT scan of the left first molar of the maxilla which has undergone endodontics (root canal treatment and crown restoration). The floor of the left maxillary antrum shows the early stages of odontogenic maxillary sinusitis due to an apical lesion of the left first molar.

Image Courtesy: Sato Clinic

# Case Example 2



Photo 1A:  
 Clinical aspect at the initial examination

**Case: Implantology**  
 Female patient referred for 3-dimensional analysis of esthetic complications after implant treatment in the left maxillary incisor region (Photo 1A).

The clinical status exhibits a mucosal recession as well as a flattening and discoloration of the facial mucosa at the implant crown. The patient complained about recurrence of the peri-implant infections.

Symbols “\*” in the photos 1C and 1D indicates the location of nasopalatine duct.

Image Courtesy: Prof. em. Dr. Daniel Buser  
 Prof. Dr. Michael Bornstein



Photo 1B:  
 Coronal image



Photo 1C:  
 Axial image



Photo 1D:  
 Sagittal image



# Specifications



Trade Name 3D Accuitomo  
XYZ Slice View Tomograph

Model MCT-1

Type EX1/2 F17

Power Supply AC 100/110/120 V  
AC 220/230/240 VAC

Power Consumption Max. 2.0 kVA

Dimensions

Main Unit W 1,620 mm × D 1,250 mm × H 2,080 mm  
(63-3/4" × 49-1/4" × 82")

Control Box W 100 mm × D 40 mm × H 115 mm  
(4" × 1-5/8" × 4-1/2")

Weight: Approx. 400 kg (Approx. 882 lbs)

X-ray Head

Tube Voltage 60 – 90 kV

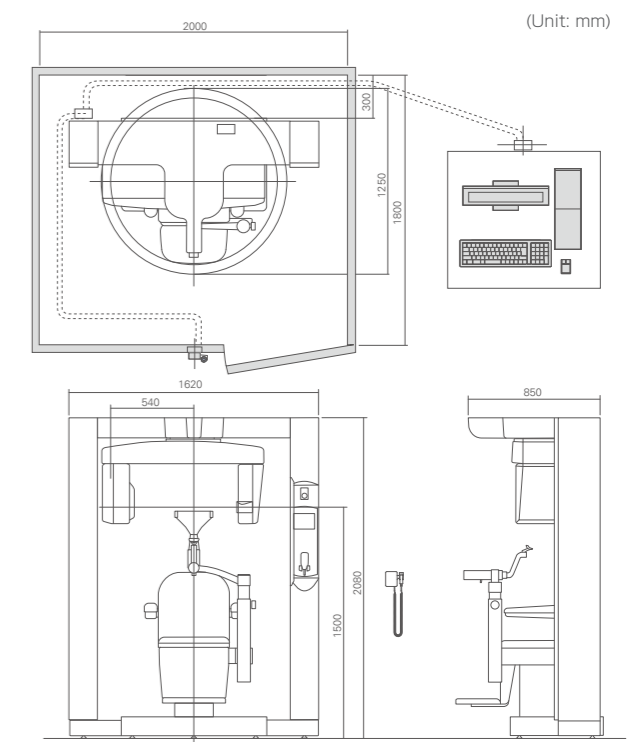
Tube Current 1 – 10 mA  
(Max. 8 mA: Hi-Fi, Hi-Res Mode)

Focal Spot Size 0.5

Exposure Time Std Mode: 17.5/9.0 sec.  
Hi-Fi Mode: 30.8/15.8 sec.  
Hi-Res Mode: 30.8/15.8 sec.  
Hi-Speed Mode: 10.5/5.4 sec.

Field of View Ø40 × H 40 mm, Ø60 × H 60 mm,  
Ø80 × H 80 mm,  
Ø100 × H 100 mm, Ø100 × H 100 mm,  
Ø140 × H 50 mm, Ø140 × H 100 mm,  
Ø170 × H 50 mm, Ø170 × H 120 mm,

Voxel Size 80 µm/125 µm/160 µm/250 µm



		Specifications
Equipment	Exposure Mode	Standard (Std) Mode
		High Fidelity (Hi-Fi) Mode
		High Resolution (Hi-Res) Mode
		High Speed (Hi-Speed) Mode
	Fields of View (Voxel Size)	Ø40 × H 40 mm (80 µm)
		Ø60 × H 60 mm (125 µm)
		Ø80 × H 80 mm (125 µm)
		Ø100 × H 50 mm (160 µm)
		Ø100 × H 100 mm (160 µm)
		Ø140 × H 50 mm (200 µm)
Ø140 × H 100mm (200 µm)		
Ø170 × H 50 mm (250 µm)		
Ø170 × H 120 mm (250 µm)		

		Specifications
Equipment	Zoom Reconstruction	
	Two Direction Scout	
Equipment	Scan Mode	360°
		180°
Software	3D Viewer	Volume rendering
		CrvdMPR
		Image Carving
		Neural Tube Drawing
Software	Data Export	One Data Viewer
		One Volume Viewer
Software	DICOM Storage	
	Print Center	

\* X-ray protection should be provided for the patient when X-rays are emitted.



Development and Manufacturing

**J. MORITA MFG. CORP.**

680 Higashihama Minami-cho, Fushimi-ku,

Kyoto 612-8533, Japan

T +81. (0)75. 611 2141, F +81. (0)75. 622 4595

**Morita Global Website**

**[www.morita.com](http://www.morita.com)**

Distribution

**J. MORITA USA, INC.**

9 Mason, Irvine CA 92618, USA

T +1. 949. 581 9600, F +1. 949. 581 8811

**J. MORITA EUROPE GMBH**

Justus-von-Liebig-Strasse 27b, 63128 Dietzenbach, Germany

T +49. (0)6074. 836 0, F +49. (0)6074. 836 299

**MORITA DENTAL ASIA PTE. LTD.**

150 Kampong Ampat

#06-01A KA Centre, Singapore 368324

T +65. 6779. 4795, F +65. 6777. 2279

**J. MORITA CORP. AUSTRALIA & NEW ZEALAND**

Suite 2.05, 247 Coward Street, Mascot NSW 2020, Australia

T +61. (0)2. 9667 3555, F +61. (0)2. 9667 3577

**J. MORITA CORP. MIDDLE EAST**

4 Tag Al Roasaa, Apartment 902, Saba Pacha 21311 Alexandria, Egypt

T +20. (0)3. 58 222 94, F +20. (0)3. 58 222 96

**J. MORITA CORP. INDIA**

Filix Office No.908, L.B.S. Marg, Opp. Asian Paints, Bhandup (West), Mumbai 400078, India

T +91-22-2595-3482

**J. MORITA MFG. CORP. INDONESIA**

28F, DBS Bank Tower, Jl. Prof. Dr. Satrio Kav. 3-5, Jakarta 12940, Indonesia

T +62-21-2988-8332, F + 62-21-2988-8201

**SIAMDENT CO., LTD.**

71/10 Mu 5, Thakham, Bangpakong, Chachuengsao 24130, Thailand

T +66. 38. 573042, F +66. 38. 573043

[www.siamdent.com](http://www.siamdent.com)

Subject to technical changes and errors.

Diagnostic and Imaging Equipment

Treatment Units

Handpieces and Instruments

Endodontic System

Laser Equipment

Laboratory Devices

Educational and Training Systems

Auxiliaries