VATECH ASSURANCE

VATECH IMAGING SYSTEMS

vatech

VATECH IMAGING SYSTEMS

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VATECH ASSURANCE

vatech

World's Premier Dental Imaging Company

Vatech is a leading manufacturer of radiographic imaging solutions for the medical, dental, and veterinary fields with offices in over 70 countries worldwide.

MISSION: ***With honesty and integrity, we strive to be the industry leader and preferred partner by providing innovative imaging solutions and first class client services that ultimately enhance the quality of patient care.***

As the US subsidiary of Vatech Inc, Vatech America is committed to providing the industry with innovative dental x-ray imaging solutions while maintaining a primary focus on ultimately enhancing the quality of patient care.

From the world's first 3-in-1 digital X-ray system to the latest in high resolution, low radiation CBCT devices, Vatech America is the clinician's preferred vendor for their diagnostic imaging endeavors.

A History of World's Firsts

2005	2007	2008	2009	2013	2017
Launched World-First 3 in 1 Digital X-ray System : **Picasso-Trio**	Launched World-First Auto-Switching System : **PaX-Duo3D**	World-First One Shot Cephalometric : **PaX-Uni3D**	World-First Free FOV System : **PaX-Reve3D**	Groundbreaking Low Radiation System: **PaX-i3D Green**	41-Layer Digital Panoramic Radiograph **PaX-i Insight**

YOUR PARTNER IN DIGITAL SUCCESS,

PaX-i™

SUPERIOR IMAGE QUALITY
- Optimal image for accurate diagnosis

TWO DEDICATED SENSORS
- Specialized sensors for Pano & Ceph
- Streamlined workflow and prolonged lifespan of sensors

USER-FRIENDLY SOFTWARE, EZDENT-i
- Complete diagnostic and consultation solution

THE ADVANCED IMAGING SOLUTION FOR ACCURATE DENTAL DIAGNOSIS

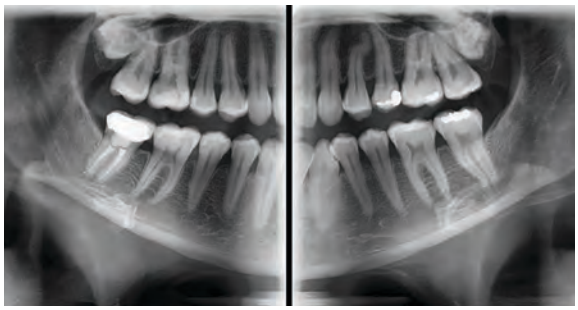
PaX-i provides the most precise and high quality panoramic image by combining imaging processing and accumulated experience in dental imaging from VATECH.
This will improve your diagnostic accuracy with increased treatment planning and patient satisfaction.

NEW STANDARD OF PANORAMIC IMAGE

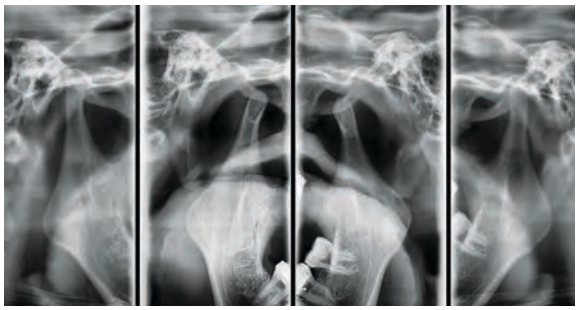
A clear and sharp panoramic image brings you better diagnostics.
Advanced details, especially in the anterior and roots can be easily viewed with the PaX-i.
These consistently high quality images are the new standard of panoramic imaging.

MAKE YOUR DIAGNOSIS EASY AND EFFICIENT WITH VARIOUS CAPTURE MODES

The PaX-i has various capture modes to meet your diagnostic needs. You can choose any capture mode based on your diagnostic needs.



Bitewing Mode



TMJ Mode

SELECTION	ARCH	EXAMINATION MODE
PANO EXAMINATION	Narrow / Normal Wide / Child	Standard / Right / Front / Left
	Orthogonal	Orthogonal Standard / Right / Front / Left Bitewing Standard / Right / Front / Left
SPECIAL EXAMINATION	Normal	TMJ LAT Open / Close TMJ PA Open / Close Sinus LAT / PA

TWO DEDICATED SENSORS

PaX-i offers two dedicated and embedded sensors for Pano and Ceph. This not only allows you to capture an optimal image from each sensor but it also creates efficient workflow.

THE ADVANCED IMAGE SOLUTION FOR ORTHODONTIC DIAGNOSIS AND TREATMENT PLANNING

EXTENDED DIAGNOSTIC VIEW FOR WIDE INSIGHT

CEPHALOMETRIC (SCAN CEPH)

The PaX-i provides optimal images exclusively designed for orthodontics.
There are two image sizes available, Lateral and Full Lateral, allowing you to choose your image size based on your diagnostic needs.

LATERAL

Provide specialized high quality images to suit orthodontics and maxillofacial surgeries.

FULL LATERAL

Full lateral image size is 30% wider and shows the occipital area of the patient, which enables comprehensive diagnosis.

EXAMINATION PROGRAM	SCAN TIME	IMAGE SIZE
LATERAL	12.9 sec	21X23 cm (8.3″X9.1″)
FULL LATERAL	16.9 sec	27X23 cm (10.6″X9.1″)

ONE SHOT CEPH

With One Shot Ceph, you can acquire high quality images with low X-ray dosage. Plus, short scan time markedly reduces motion artifacts.

CEPHALOMETRIC (ONE SHOT TYPE)

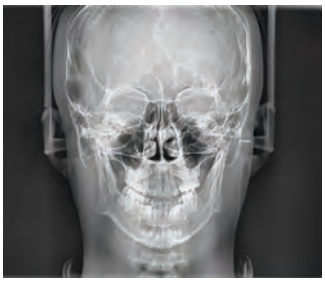
Superior image quality will be delivered using the a-Si TFT sensors.
Three different ceph image sizes reduce unnecessary X-ray dosage and scans the ideal area of cranial anatomy for your diagnosis and treatment planning.

LATERAL

30X25 cm (12"X10")

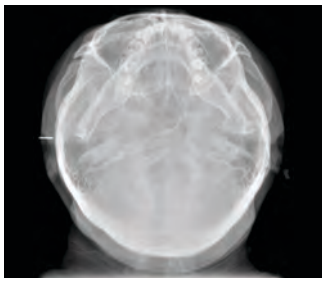
OP (One Shot Premium)

PA



Carpus

SMV(Submentovertex)



PRODUCT CONFIGURATION

	PANO	CEPH	
		SCAN	ONE SHOT
PaX-i	•	–	–
PaX-i SC	•	•	–
PaX-i OP	•	–	•

SPECIFICATIONS (PaX-i : **PCH-2500**)

Function	Pano + Ceph
Scan Time	Pano : HD 13.5 sec / Normal 10.1 sec Ceph : Scan 12.9 sec / One-shot 0.9 sec
Focal Spot	0.5 mm
Tube Voltage/ Current	50-90 kVp / 4-10 mA

Ceph FOV Size	**SC** 8.3"X9.1" [LAT, PA, SMV, Waters View, Carpus] 10.6"X9.1" [Full LAT] **OP** 12"X10" [LAT, PA, SMV, Waters View, Carpus]
Gray Scale	14 bit
Patient Positioning	Standing / Wheel-Chair Accessible

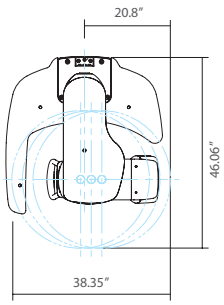
DIMENSIONS

PaX-i
Pano

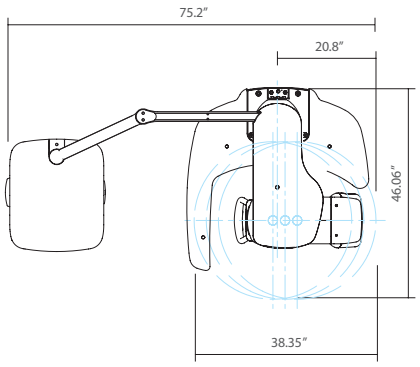
PaX-i SC
Pano / Scan Ceph

PaX-i OP
Pano / One Shot Ceph

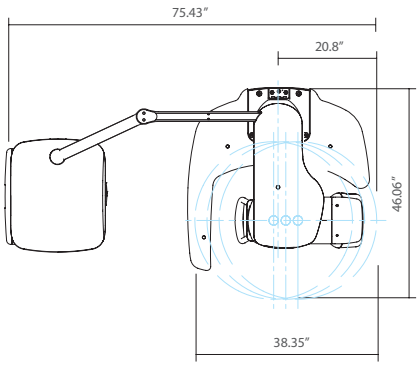
TOP VIEW



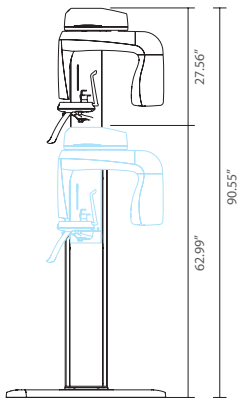
TOP VIEW



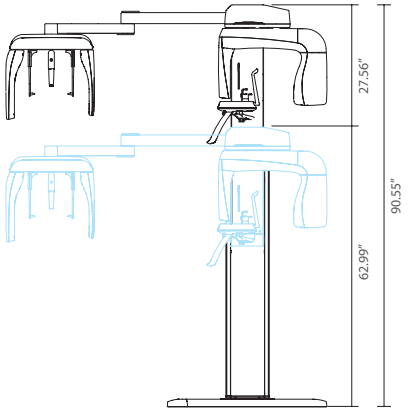
TOP VIEW



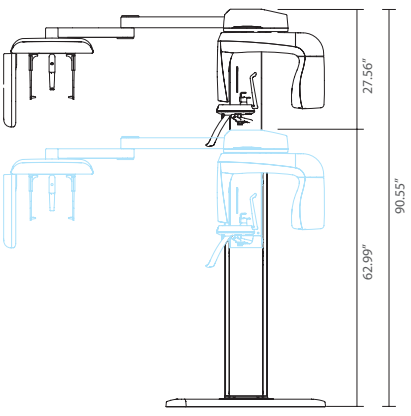
FRONT VIEW



FRONT VIEW



FRONT VIEW



BEYOND 2D, DEPTH ADDED PANORAMA

PaX-i Insight™

INSIGHT PAN
- The next evolutionary step forward in panoramic imaging with insight pan

RAPID CEPH
- 1.9 second acquisition time produces superb image quality
- Reduced motion artifacts and faster workflow

USER-FRIENDLY EZDENT-I SOFTWARE
- Powerful diagnostic value with Insight feature
- Complete solution for consultation
- Easy to learn, easy to use

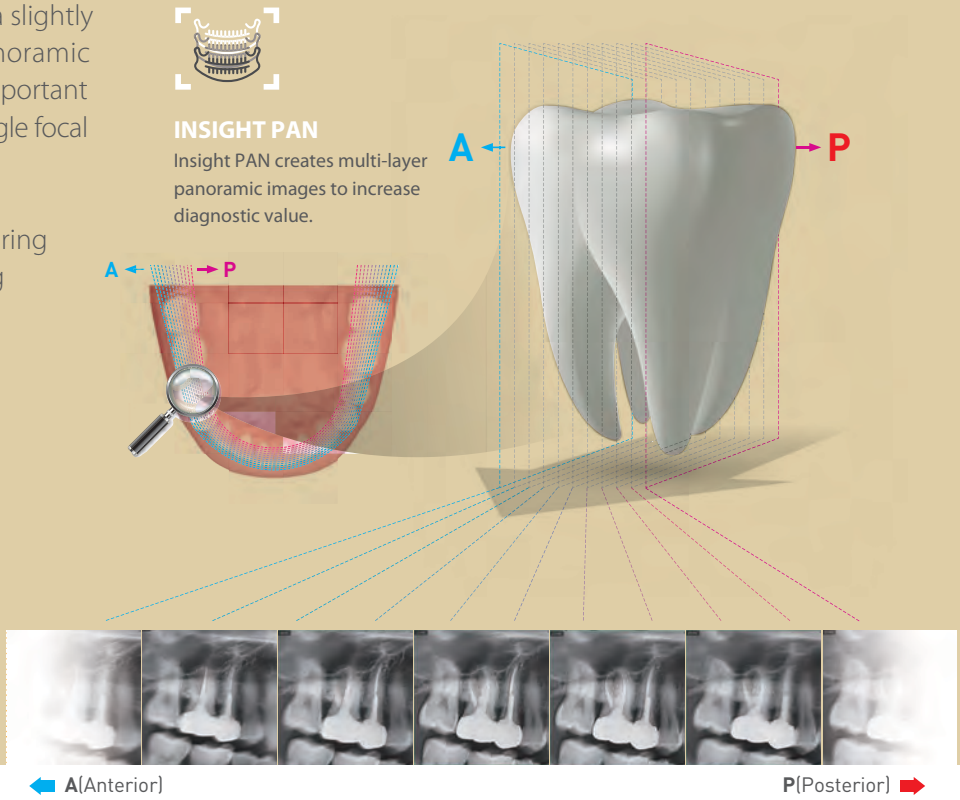
ADVANCED IMAGE SOLUTION WITH INSIGHT PAN

The next evolutionary step forward in panoramic imaging.

The PaX-i Insight is capable of taking a multi-layered panoramic image called an Insight Pan which provides a unique, in-depth look across a single focal trough.

Because each patient may have a slightly different arch, conventional panoramic images may occasionally miss important details which land outside of a single focal layer.

Insight Pans are capable of capturing multiple-layered images, insuring that all details are captured in a depth-added panoramic image.



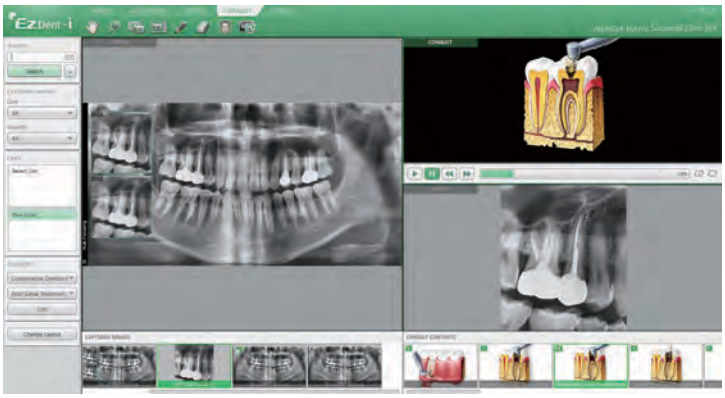
MINIMIZE MOTION ARTIFACTS WITH RAPID CEPH TECHNOLOGY

The next step in cephalometric technology, Vatech's new Rapid Ceph minimizes motion artifacts and enables faster diagnostic work flow while providing the highest quality digital image.

GREAT CLINICAL CARE WITH RAPID CEPH TECHNOLOGY

EZDENT-I: QUICK AND EASY DENTAL IMAGING SOFTWARE

EzDent-i provides a wide array of functions designed to streamline the dental workflow.
It conveniently performs specialized diagnosis and consultation via our easy-to-use user interface.



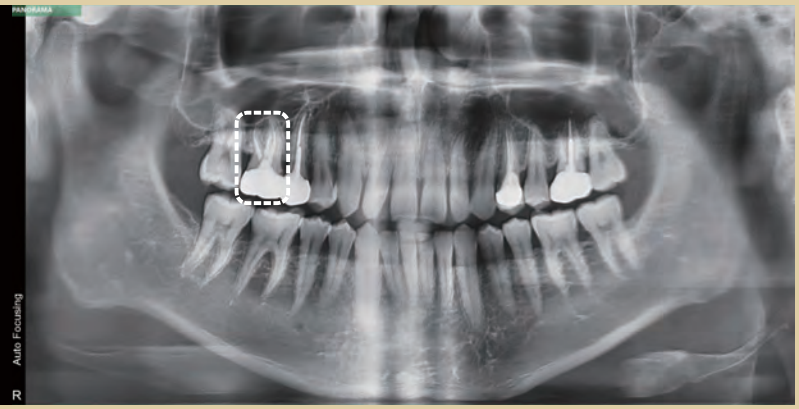
Diagnosis
- Depth added diagnostics with Insight Pan

Simulation
- 2-click implant simulation
- Natural tooth whitening simulation
- Simplified canal tracing

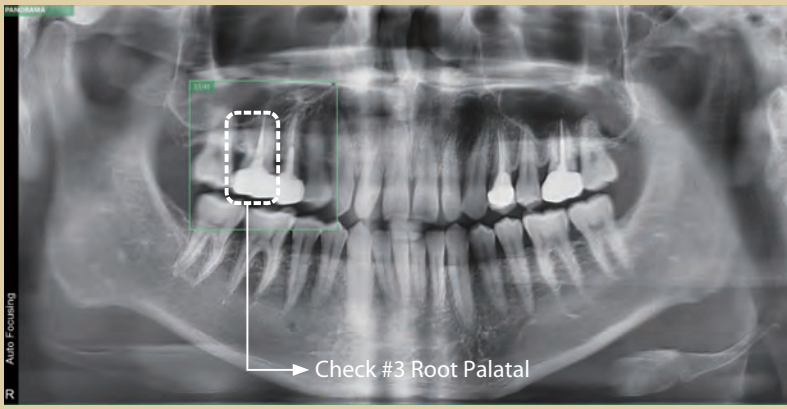
Consultation
- 244 consultation videos
- Add user-created consultation contents

WHAT IS INSIGHT?

The next-generation in panoramic technology, Insight Pans allow doctors to obtain never before seen, in-depth diagnostic information from the anterior to posterior on a digital panoramic image.
The Insight feature allows doctors to explore their region of interest, giving the capability to find mesiobuccal, distobuccal, and even palatal root information.



STANDARD PANORAMA



INSIGHT FEATURE

Using the PaX-i Insight's Next Generation Panoramic Technology, Discover:

- ☑ Hidden multi roots and canals
- ☑ Location of pulp and gutta-percha
- ☑ Broken files or root fractures

PRODUCT CONFIGURATION

	PANO	CEPH
PaX-i Insight	•	–
PaX-i Insight SC	•	•

SPECIFICATIONS (PaX-i Insight : **PCH-30CS**)

Function		Pano + Ceph	
Focal Spot		0.5 mm (IEC60336)	
Scan Time	Pano	Normal	10.4 / 14.0 / 21.0 sec
		Insight PAN	10.4 sec
	Ceph	1.9 / 3.9 sec	
Gray Scale		14 bit	
Tube Voltage / Current		60 ~ 99 kV / 4 ~ 10 mA	
Weight	Without Ceph unit	209.4 lbs. – without Base	
		297.6 lbs. – with Base	
	With Ceph unit	264.5 lbs. – without Base	
		352.7 lbs. – with Base	
Dimensions	Without Ceph unit	38.98 Inch (L) x 47.24 Inch (W) x 90.55 Inch (H)	
	With Ceph unit	75.98 Inch (L) x 47.24 Inch (W) x 90.55 Inch (H)	

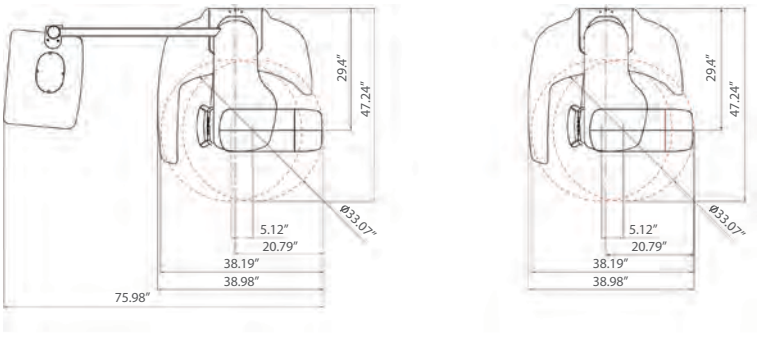
* The specifications are subject to change without prior notice.

DIMENSIONS

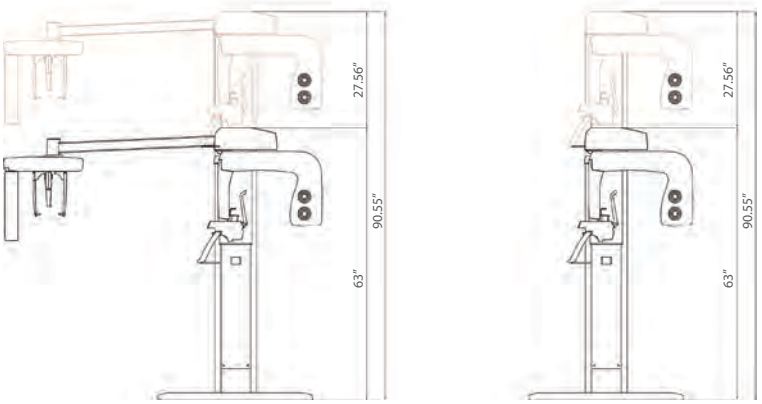
With CEPH unit

Without CEPH unit

TOP VIEW



FRONT VIEW



No More than what you *want*, **No Less** than what you *need*.

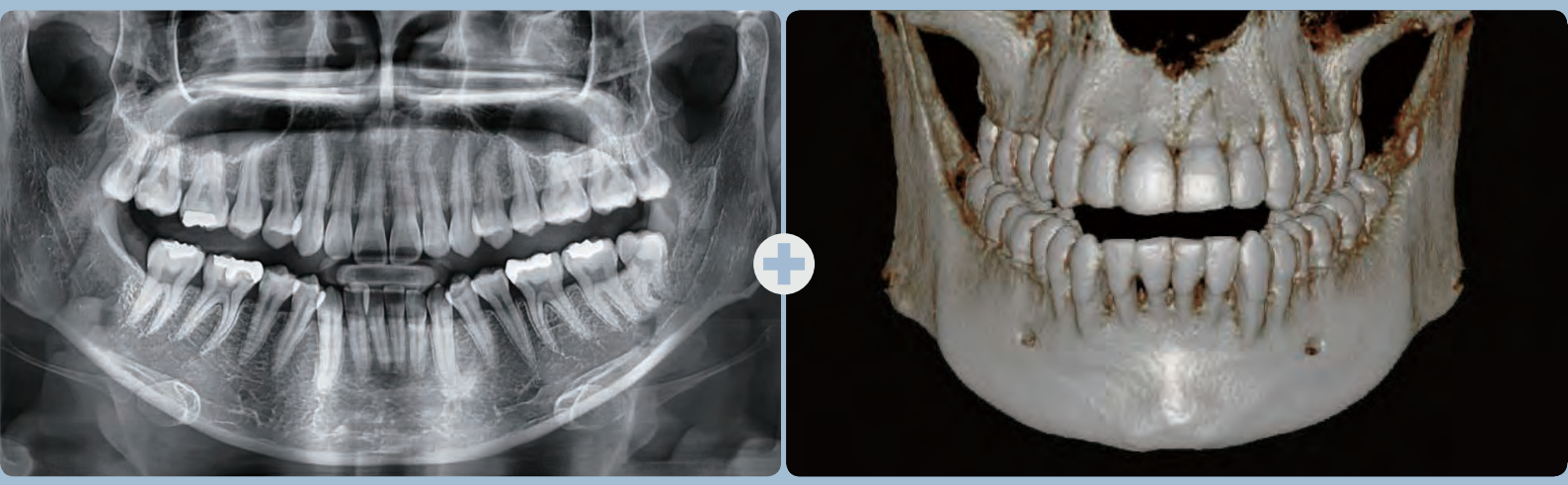
PaX-i3D Smart™

- ONE SCAN, TWO IMAGES
- INNOVATIVE COMPRESSED SENSING TECHNOLOGY
- EXTENDED ARCH SHAPED FOV

SMART INNOVATION

ONE SCAN, TWO IMAGES

One scan with a PaX-i3D Smart gives you not just a CT image but also an Auto Pano image. This means, patients who require both images do not need to undergo two X-ray scans. Also, CT and Auto Pano images are displayed within the one viewer feature.



* Conventional panorama mode is provided.

[2D AND 3D IN ONE VIEWER]

Viewing 2D and 3D images together provides many benefits. There is no need to utilize two different software programs and the one viewer feature presents a professional look for your patients.

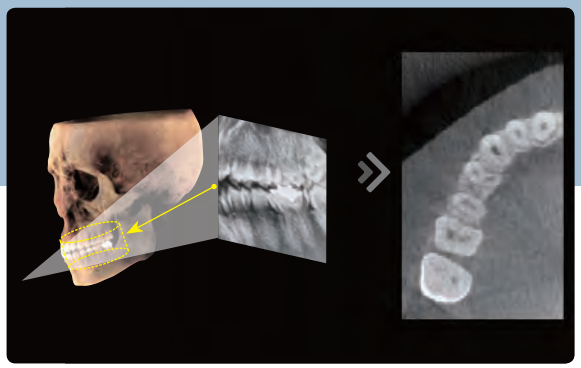
This layout helps patients better understand the images, which will eventually result in increasing acceptance rates.

SMART INNOVATION FOR ACCURATE DIAGNOSIS

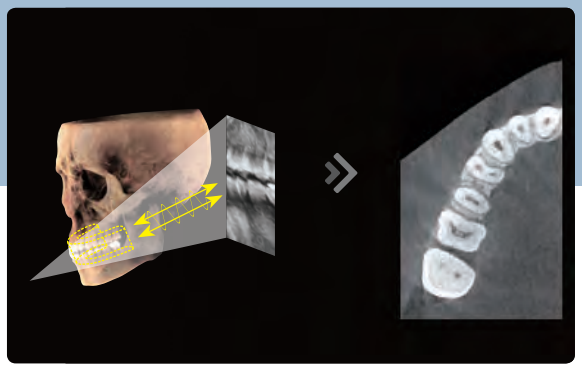
INNOVATIVE COMPRESSED SENSING TECHNOLOGY

3D image quality has dramatically improved based on the innovative image reconstruction technology.

Normal Image Reconstruction

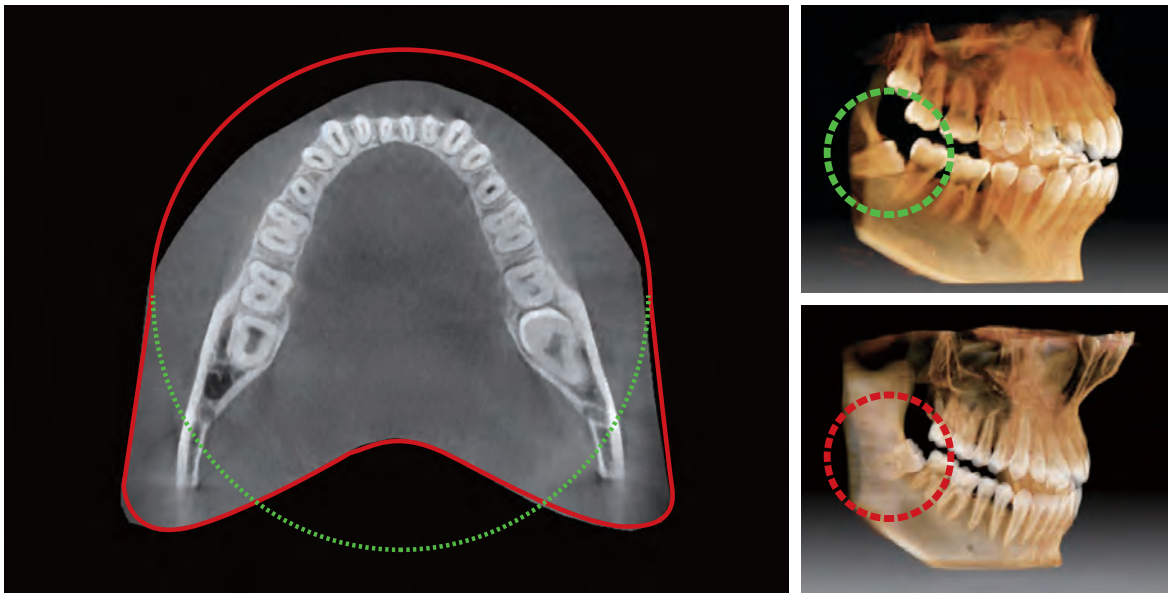


SMART Image Reconstruction



EXTENDED ARCH SHAPED FOV

The innovative FOV of the PaX-i3D Smart provides an arch-shaped volume, which shows a wider view of dentition compared to other devices of the same FOV. For impacted 3rd molars, there is a high probability that the volume will miss this important anatomy. The "arch shaped volume" of PaX-i3D Smart eliminates this possibility and provides the clinician with all the necessary dentition for thorough diagnosis.



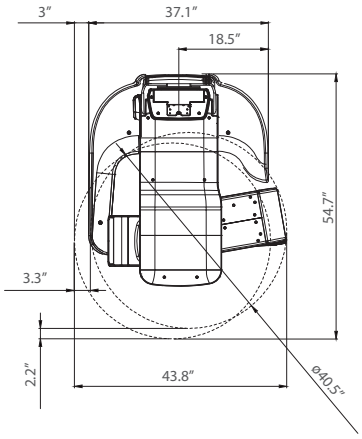
PRODUCT CONFIGURATION

	CBCT	PANO	CEPH	
			SCAN	ONE SHOT
PaX-i3D Smart	•	•	–	–
PaX-i3D Smart SC	•	•	•	–

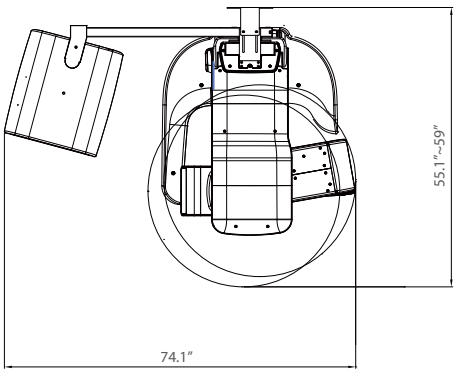
SPECIFICATIONS (PaX-i3D Smart : **PHT-30LFO**)

Function		CT(with Auto Pano) + Pano + Ceph
Focal Spot		0.5 mm
CT FOV Size		5X5 cm / 10X8.5 cm (Anatomical 12X9 cm)
Voxel Size		0.08 mm / 0.2 mm / 0.3 mm
Scan Time	CT	18 sec
	Pano	13.6 sec / 7 sec
	Ceph	12.9 sec
Recon Time	CT	Max. 90 sec (10X9 / 0.2 Voxel Basis)
	Pano	Less than 2 sec
Gray Scale		14 bit
Tube Voltage / Current		50 - 99 kVp / 4 -16 mA

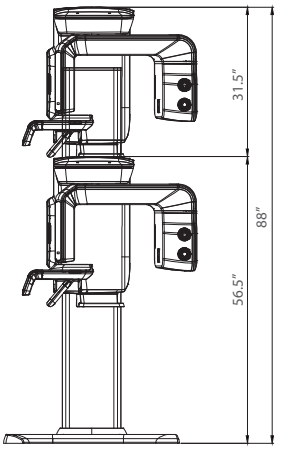
DIMENSIONS

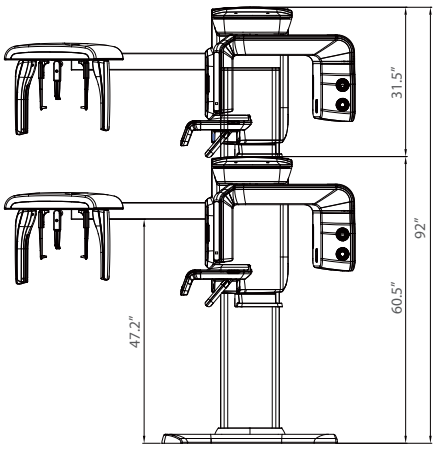


TOP VIEW



FRONT VIEW





An additional 3 inches (76.2 mm) of space is required behind the unit for wall mount bracket installation (mandatory unless there is a base mount installation).

YOUR FIRST PARTNER FOR 3D DIAGNOSIS,

PaX-i3D™

OPTIMAL FOV SIZES FOR 3D DIAGNOSIS
- Increase your diagnosis and treatment accuracy
- Multi FOV sizes range from 5X5 to 12X9

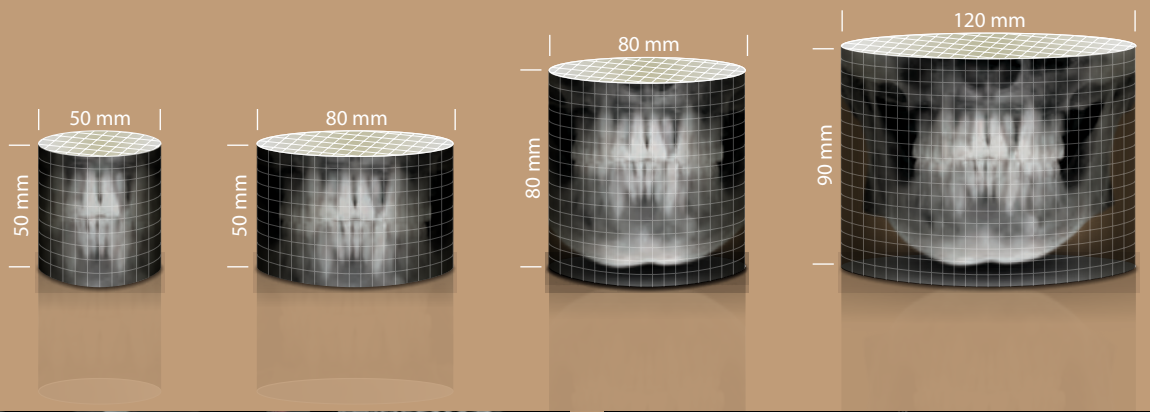
SPECIAL SOFTWARE FOR EACH SPECIALTY
- Analyze Ez3D-i images with advanced tools and functions
- Ez3D-i supports effective and efficient communication with your patients

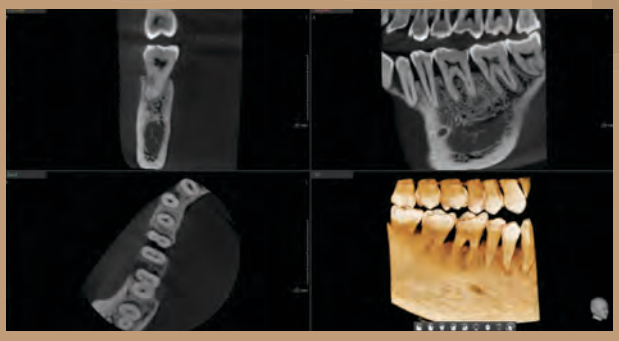
WIDE RANGE OF CEPH MODES
- Scan Type: LAT / Full LAT
- One Shot Type: Small / Medium / Large

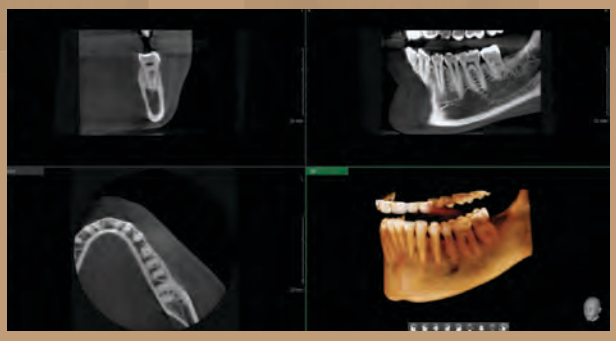
POWERFUL DIAGNOSTIC VALUE WITH 3D IMAGES

FLEXIBLE 3D IMAGING WITH MULTI FOV SELECTION

The PaX-i3D provides 4 multi FOV sizes ranging from 5X5 to 12X9.
By selecting the appropriate FOV size, you can view the optimal image size for your diagnostic needs, reducing unnecessary X-ray radiation for patients.





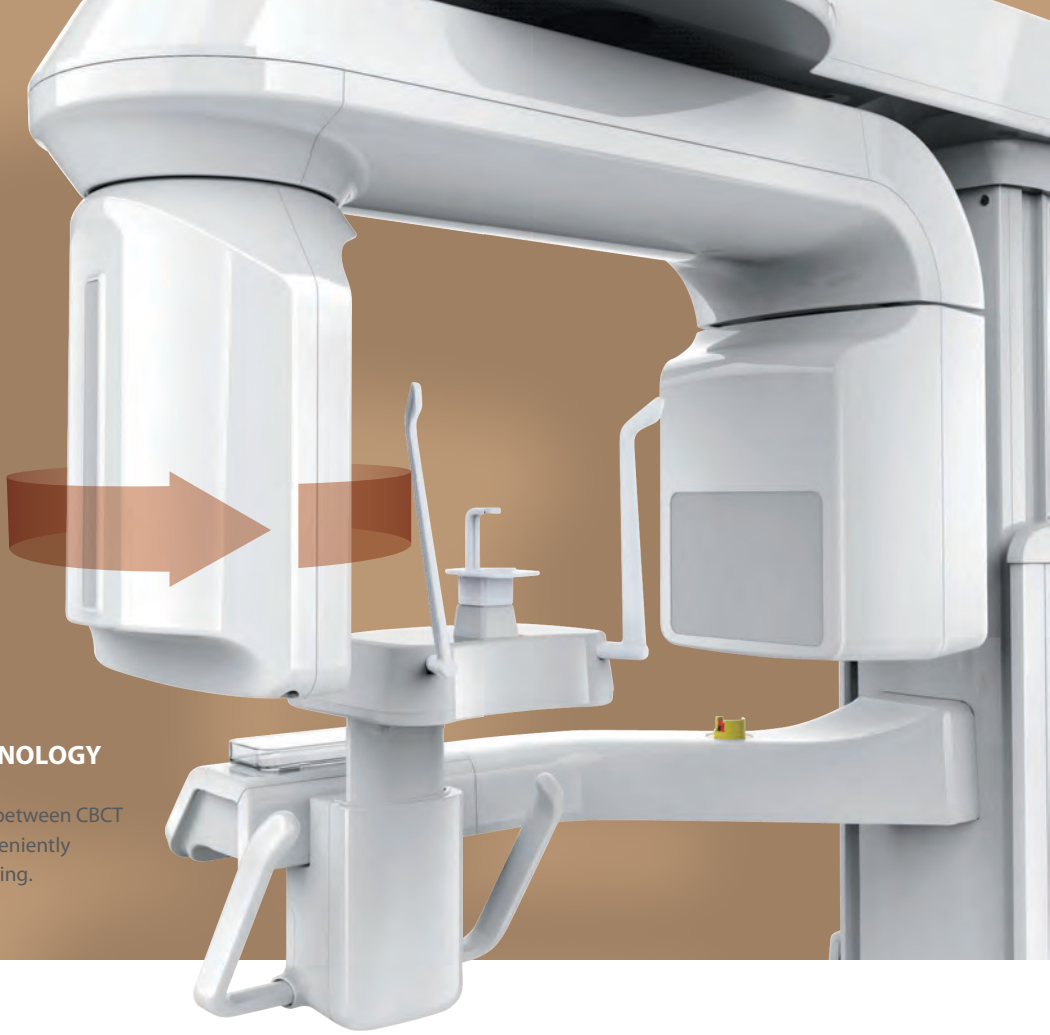


FOV 5X5

5X5 images are useful for a specific area diagnosis with minimal X-ray exposure for patients. It can especially increase the accuracy of endodontic diagnosis by specifically checking the number of root canals and abnormal root canal shapes, such as C-shapes that are difficult to check when using a 2D X-ray system.

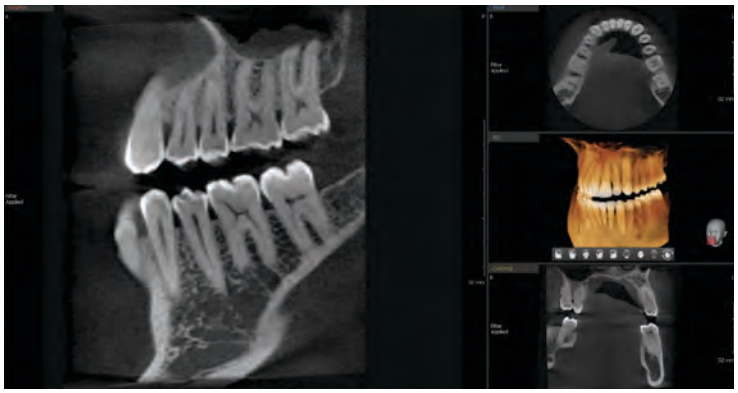
FOV 8X5

8X5 images can provide more extended oral information on maxillary or mandibular areas. An accurate treatment plan can be established by taking into account the major anatomical structures like mandibular nerve, mental foramen or maxillary sinus.



PATENTED AUTO-SWITCHING TECHNOLOGY

PaX-i3D offers convenient and safe 'Patented Auto-Switching Technology' system between CBCT and Panoramic sensors. This smart system conveniently prevents sensor damage from accidental dropping.



FOV 8X8

8X8 images enable comprehensive diagnosis and treatment planning including both maxillary and mandibular areas in a single scan. It is useful for complex implant surgery as well as left or right TMJ diagnosis.

FOV 12X9

12X9 images can provide the most optimal information for oral diagnosis fully covering both maxillary and mandibular structures including the 3rd molar region in a single scan. It is suitable for most oral surgery cases as well as multiple implant surgery.

PROFESSIONAL DIAGNOSTIC VALUE WITH CEPHALOMETRIC IMAGES

EXTENDED DIAGNOSTIC VALUE FOR WIDE INSIGHT

CEPHALOMETRIC (SCAN TYPE)

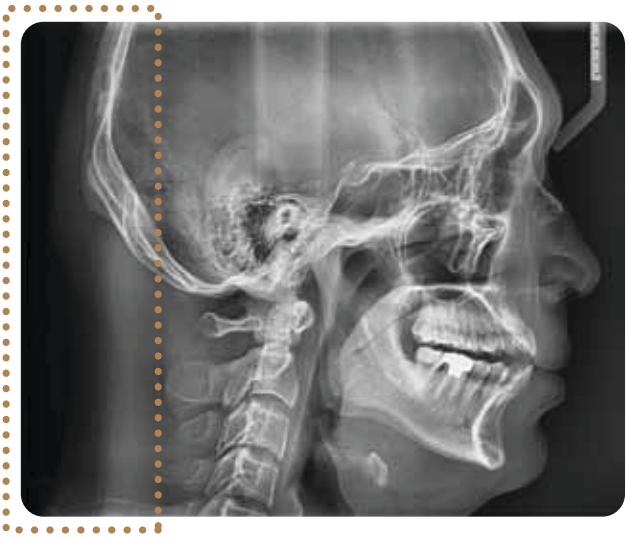
The PaX-i3D provides optimal images with an exclusively designed sensor for cephalometric diagnosis.
As it offers two image sizes, LAT and Full LAT, you can choose one of them based on your diagnostic needs.

Built-in Sensor System

The PaX-i3D enables you to acquire high quality images in a safe and comfortable environment.
You don't need to waste time or risk damage by changing sensors.

LATERAL

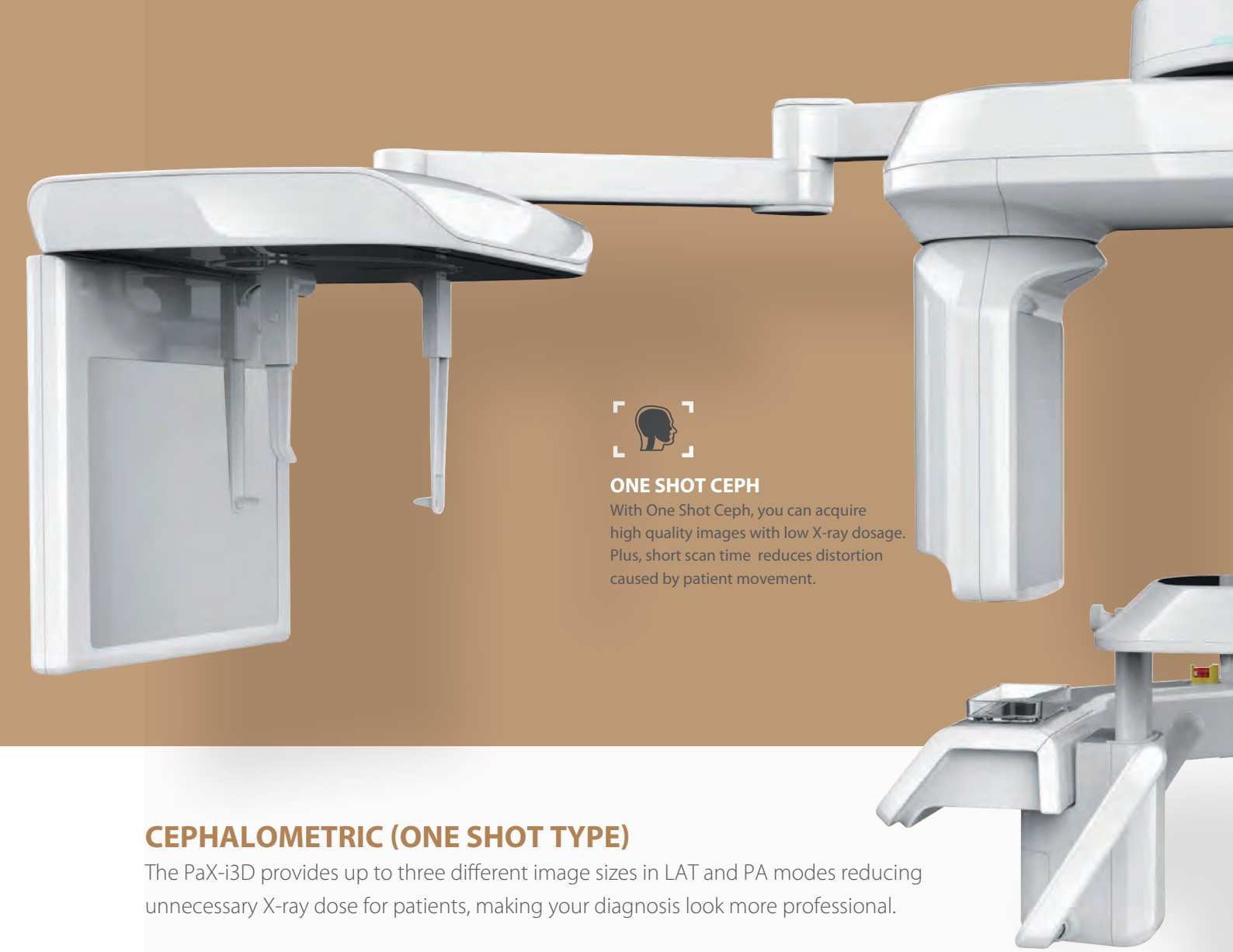
Provide specialized high quality images to suit orthodontics and maxillofacial surgeries.



FULL LATERAL

Full lateral image size is 30% wider and shows the occipital area of the patient, which enables comprehensive diagnosis.

EXAMINATION PROGRAM	SCAN TIME	IMAGE SIZE
LATERAL	12.9 sec	21X23 cm (8.3"X9.1")
FULL LATERAL	16.9 sec	25X23 cm (9.8"X9.1")



ONE SHOT CEPH

With One Shot Ceph, you can acquire high quality images with low X-ray dosage. Plus, short scan time reduces distortion caused by patient movement.

CEPHALOMETRIC (ONE SHOT TYPE)

The PaX-i3D provides up to three different image sizes in LAT and PA modes reducing unnecessary X-ray dose for patients, making your diagnosis look more professional.

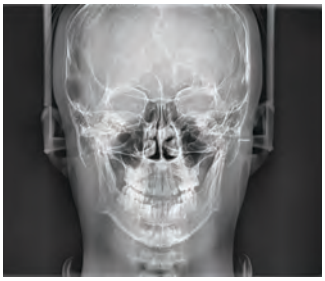
SMALL 20X20 cm (8″X8″)

MEDIUM 23X25 cm (9″X10″)

LARGE 30X25 cm (12″X10″)

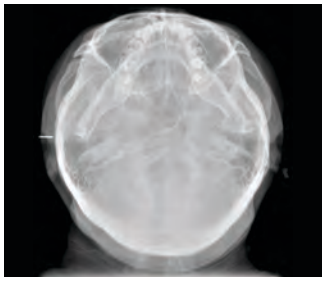
OP (One Shot Premium)

PA



Carpus

SMV(Submentovertex)



PRODUCT CONFIGURATION

	CBCT	PANO	CEPH	
			SCAN	ONE SHOT
PaX-i3D	•	•	–	–
PaX-i3D SC	•	•	•	–
PaX-i3D OP	•	•	–	•

SPECIFICATIONS (PaX-i3D : **PHT-6500**)

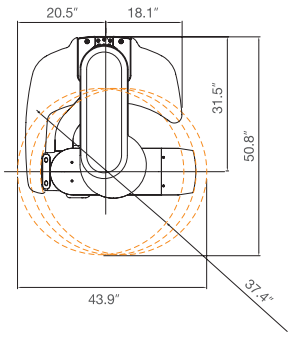
Function	Pano + CBCT + Ceph
CT - FOV Size	8X8 cm : Multi [5X5 / 8X5 / 8X8] cm 12X9 cm : Multi [5X5 / 8X5 / 8X8 / 12X9] cm
Voxel Size	5X5, 8X5 cm : 0.12 mm / 0.2 mm 8X8, 12X9 cm : 0.2 mm / 0.3 mm
Scan Time	Pano : 10.1 sec (Normal) HD, UHD Scan Ceph : 12.9 sec (Full LAT - 16.9 sec) One Shot Ceph : 0.9 - 1.2 sec CBCT : Standard-15 sec / High-24 sec

Ceph FOV Size	**SC** 8.3"X9.1" [LAT, PA, SMV, Waters View, Carpus] 10.6"X9.1" [Full LAT] **OP** 8"X8" [LAT, PA] 9"X10" [LAT, PA] 12"X10" [LAT, PA, SMV, Waters View, Carpus]
Gray Scale	14 bit
Patient Position	Standing / Wheel-Chair Accessible
Tube Voltage/ Current	50-90 kVp / 4-10 mA

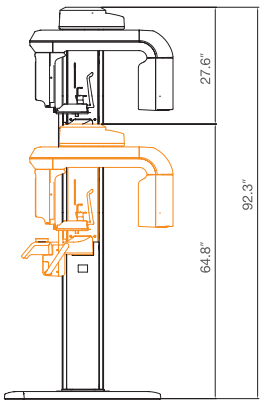
DIMENSIONS

PaX-i3D
Pano / CBCT

TOP VIEW

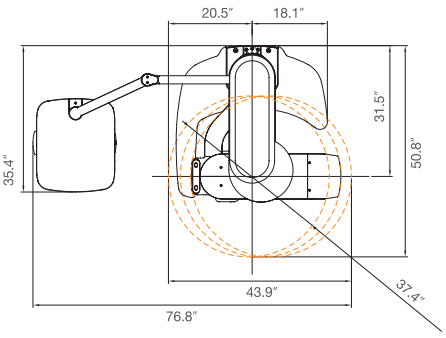


FRONT VIEW

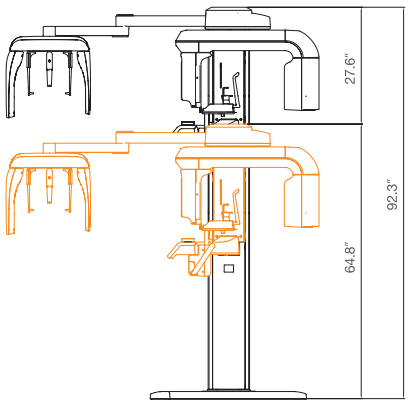


PaX-i3D SC
Pano / CBCT / Scan Ceph

TOP VIEW

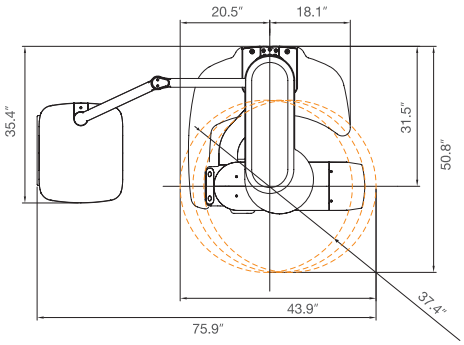


FRONT VIEW

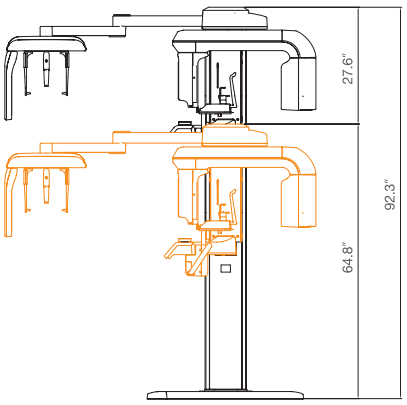


PaX-i3D OP
Pano / CBCT / One Shot Ceph

TOP VIEW



FRONT VIEW



THE NEW DIGITAL ENVIRONMENT

PaX-i3D Green™

GREEN CBCT
- VATECH's innovative technology for ultra low X-ray dose
- Green CBCT protects both patient and user

RAPID SCAN
- Minimized motion artifact and faster workflow
- Superb image quality from a rapid ***5.9 sec*** scan

MULTI FOV SIZES
- Wide range of FOV sizes from 5X5 to 15X15
- Optimal size for specific diagnosis reducing X-ray exposure to patients

EASY AND SIMPLE SOFTWARE, Ez3D-i
- Easy to learn, easy to use
- Intuitive user interface and powerful consulting tools

PROFESSIONAL DIAGNOSTIC VALUE WITH 3D IMAGES

WIDE RANGE OF DIAGNOSIS WITH MULTI FOV SELECTION

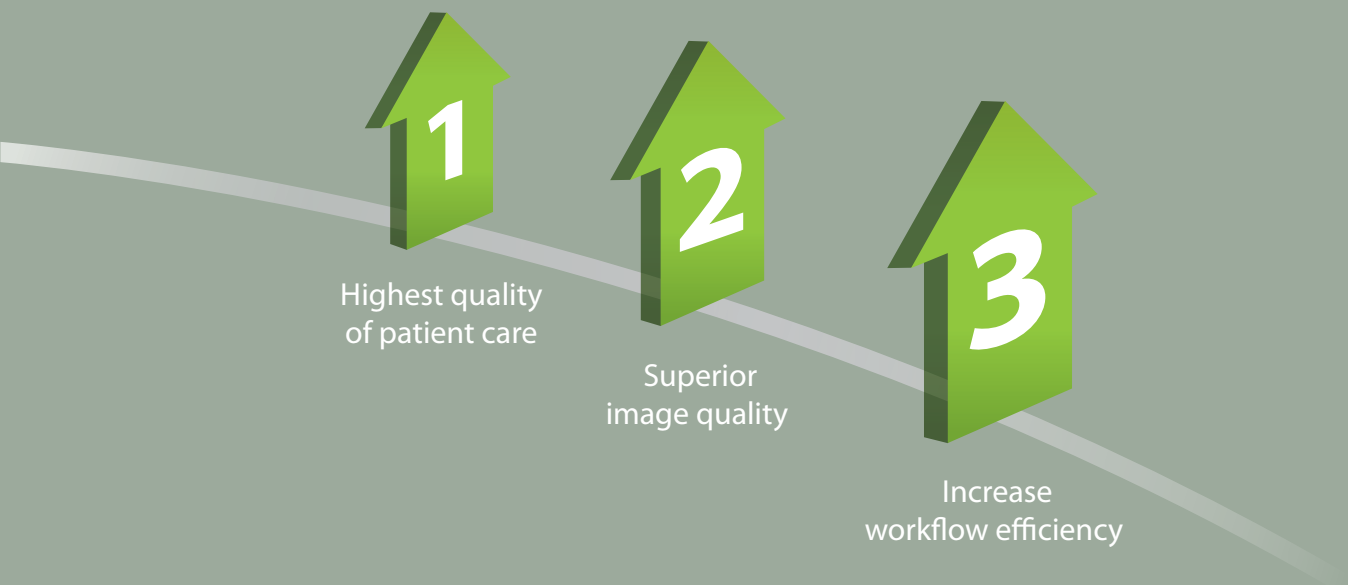
With expanded FOV sizes, the PaX-i3D Green offers valuable diagnoses for professionals.

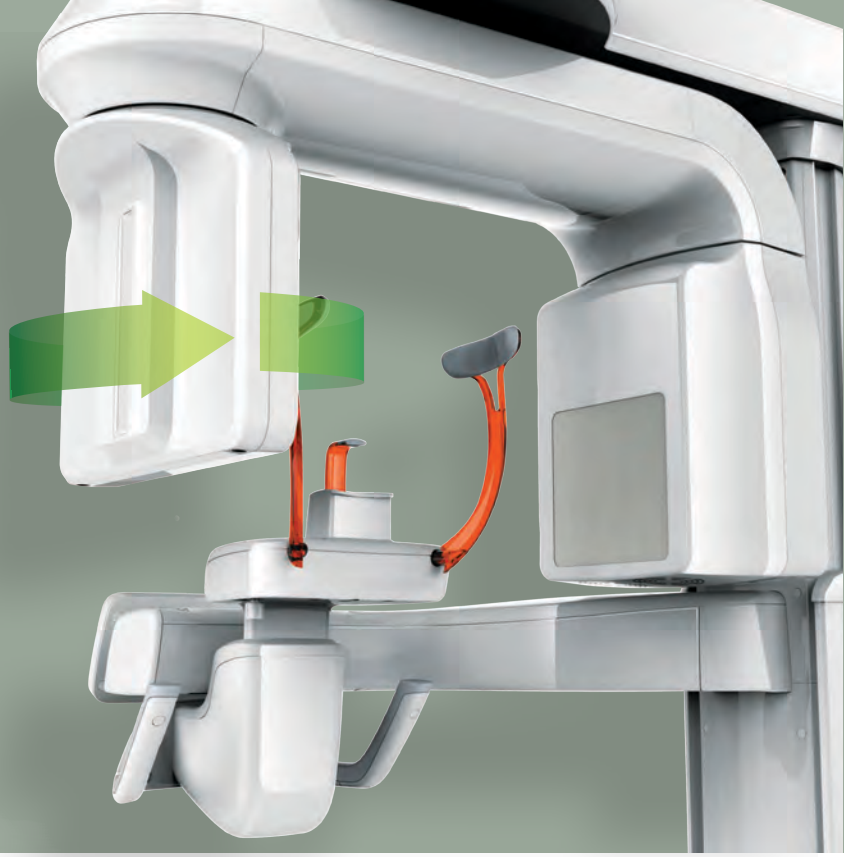
Clinical Care with GREEN INNOVATION

PaX-i3D Green produces superb diagnostic images, which will be a source of pride for any dental practice, and improves the health and safety of your patients.

Experience excellent image quality with VATECH'S advanced technology.

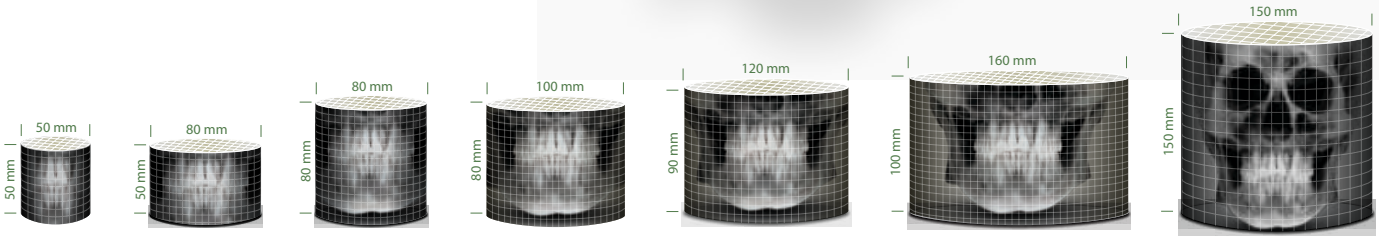
5.9 sec
Scan Time

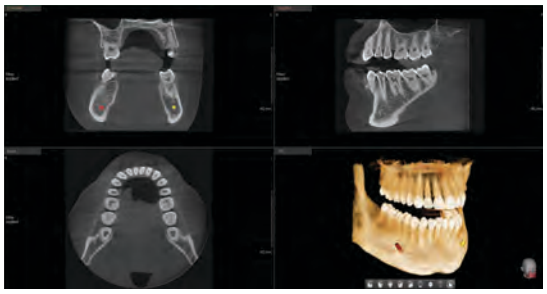




PATENTED AUTO-SWITCHING TECHNOLOGY

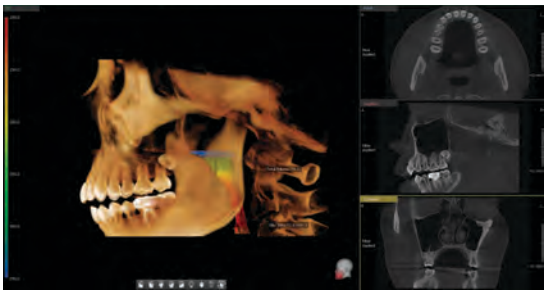
PaX-i3D Green offers convenient and safe 'Patented Auto-Switching Technology' system between CBCT and Panoramic sensors. This smart system conveniently prevents sensor damage from accidental dropping.





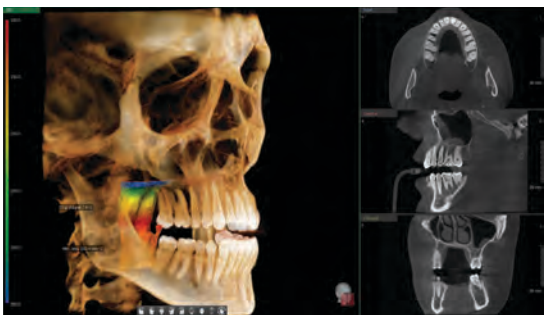
FOV 10X8

10X8 cm FOV is ideal for dual arch scans of the entire dentition; including third molars, implants and surgical guides.



FOV 16X10

16X10 cm FOV provides the optimal information for diagnosis of the entire dental arch, including the TMJ. In addition, implant planning and facial surgery treatment planning is possible.



FOV 15X15

15X15 images from PaX-i3D enable you to do a comprehensive diagnosis including oral and maxillofacial surgery. This perfect FOV size will be helpful for complex orthognathic, implant, and orthodontic surgery.

PROFESSIONAL DIAGNOSTIC VALUE WITH CEPHALOMETRIC IMAGES

EXTENDED DIAGNOSTIC VALUE FOR WIDE INSIGHT

CEPHALOMETRIC (SCAN TYPE)

PaX-i3D Green provides optimal images with an exclusively designed sensor for cephalometric diagnosis. As it offers two image sizes, LAT and Full LAT, you can choose one of them based on the purposes of your diagnostic needs.

Built-in Sensor System

PaX-i3D Green enables you to acquire high quality images in a safe and comfortable environment. Best of all, you don't need to waste time or risk damage by changing sensors.

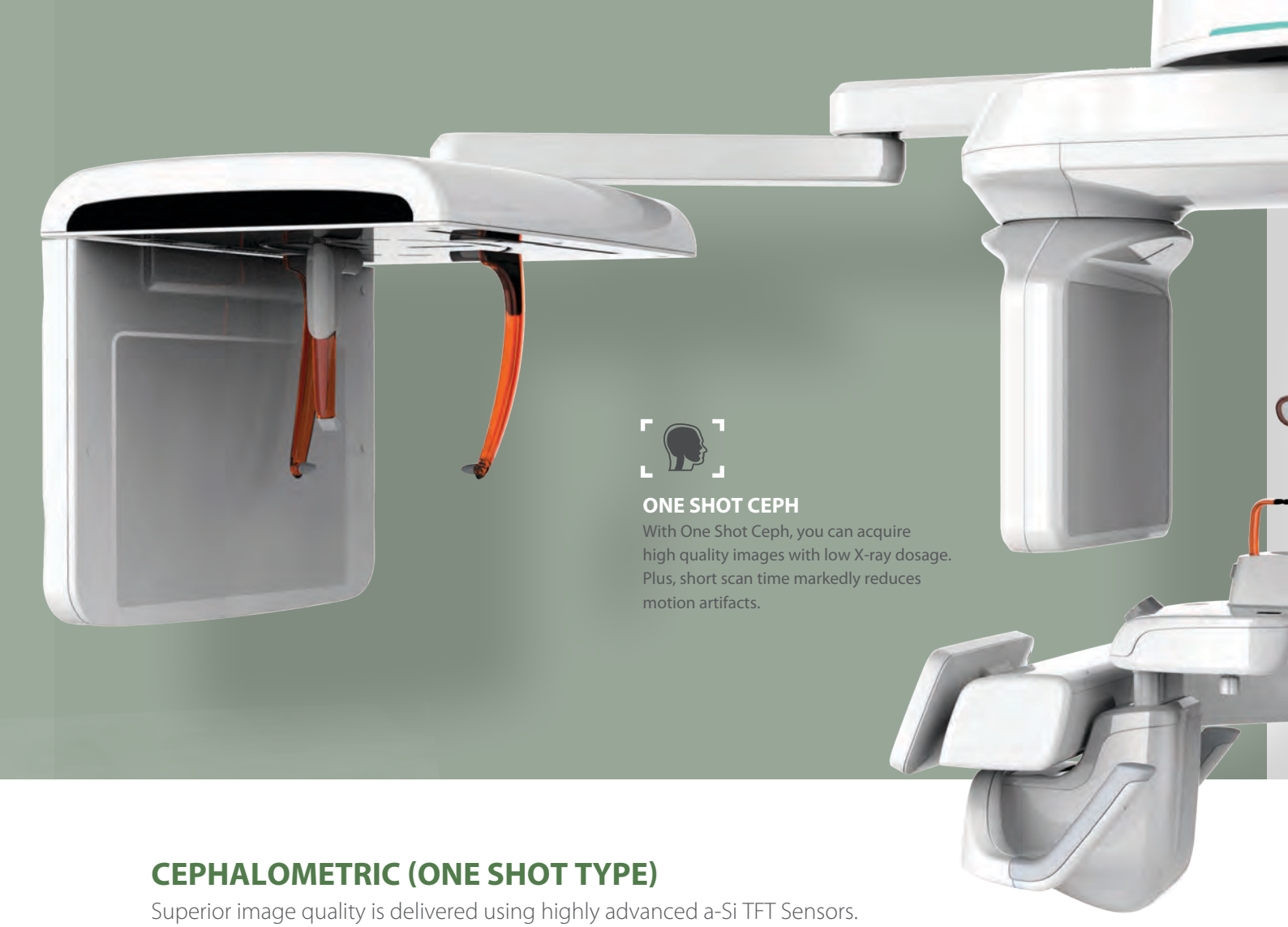
LATERAL

Provide specialized high quality images to suit orthodontics and maxillofacial surgeries.

FULL LATERAL

Full lateral image size is 30% wider and shows the occipital area of the patient, which enables comprehensive diagnosis.

EXAMINATION PROGRAM	SCAN TIME	IMAGE SIZE
LATERAL	3.9 sec	21X23 cm (8.3"X9.1")
FULL LATERAL	16.9 sec	27X23 cm (10.6"X9.1")



ONE SHOT CEPH
With One Shot Ceph, you can acquire high quality images with low X-ray dosage. Plus, short scan time markedly reduces motion artifacts.

CEPHALOMETRIC (ONE SHOT TYPE)

Superior image quality is delivered using highly advanced a-Si TFT Sensors.
Three different ceph image sizes reduce unnecessary X-ray dosage and scans the ideal area of cranial anatomy for your diagnosis and treatment planning.

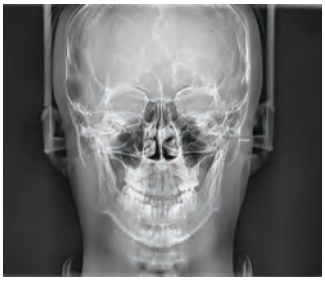
SMALL 20X20 cm (8″X8″)

MEDIUM 23X25 cm (9″X10″)

LARGE 30X25 cm (12″X10″)

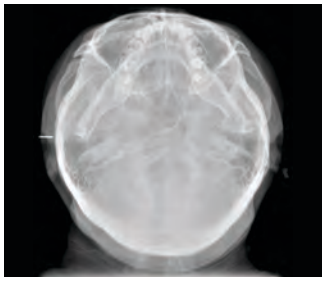
OP (One Shot Premium)

PA



Carpus

SMV(Submentovertex)



PRODUCT CONFIGURATION

	CBCT	PANO	CEPH	
			SCAN	ONE SHOT
PaX-i3D Green	•	•	–	–
PaX-i3D Green SC	•	•	•	–
PaX-i3D Green OP	•	•	–	•

SPECIFICATIONS (PaX-i3D Green : **PHT-60CFO**)

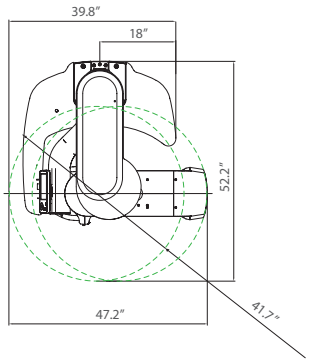
Function	Pano + CBCT + Ceph
CT - FOV Size	10X8 cm : Multi [5X5 / 8X5 / 8X8 / 10X8 cm] 16X10 cm : Multi [5X5 / 8X5 / 8X8 / 12X9 / 16X10 cm] 15X15 cm : Multi [5X5 / 8X5 / 8X8 / 12X9 / 15X15 cm]
Voxel Size	5X5 cm : 0.08 mm / 0.2 mm 8X8, 10X8, 12X9, 16X10 cm : 0.2 mm / 0.3 mm 15X15 cm : 0.25 mm / 0.3 mm
Scan Time	Pano : 10.1 sec (Normal) (HD, fast) Scan Ceph : 3.9 sec (Full LAT - 16.9 sec) One Shot Ceph : 0.9 - 1.2 sec CBCT : 5.9 sec, 9 sec (FOV 15X15 model)

Ceph FOV Size	**SC** 8.3"X9.1" [LAT, PA, SMV, Waters View, Carpus] 10.6"X9.1" [Full LAT] **OP** 8"X8" [LAT, PA] 9"X10" [LAT, PA] 12"X10" [LAT, PA, SMV, Waters View, Carpus]
Gray Scale	14 bit
Patient Position	Standing / Wheel-Chair Accessible
Tube Voltage/ Current	50-100 kVp(1 kV step) / 4-16 mA(0.1 mA step)

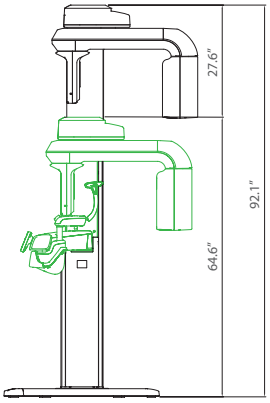
DIMENSIONS

PaX-i3D Green
Pano / CBCT

TOP VIEW

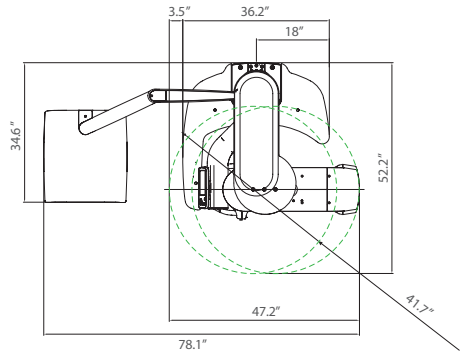


FRONT VIEW

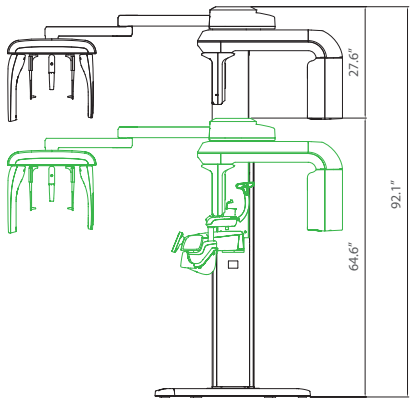


PaX-i3D Green SC
Pano / CBCT / Scan Ceph

TOP VIEW

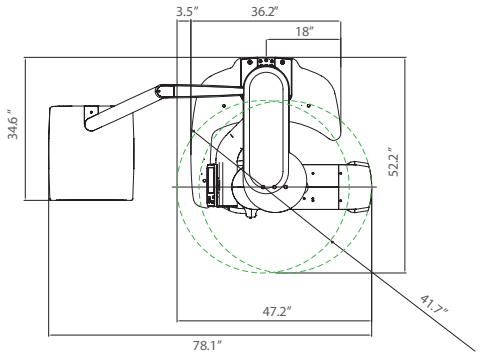


FRONT VIEW

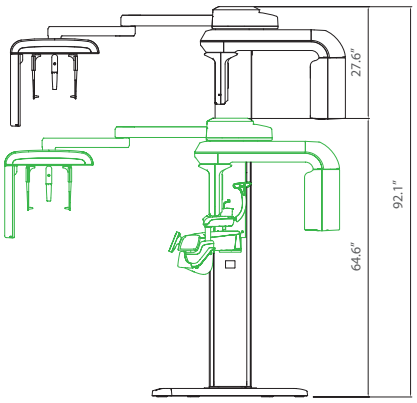


PaX-i3D Green OP
Pano / CBCT / One Shot Ceph

TOP VIEW



FRONT VIEW



An additional 7.5 inches (191 mm) of space is required behind the unit for wall mount bracket installation (mandatory unless there is a base mount installation).

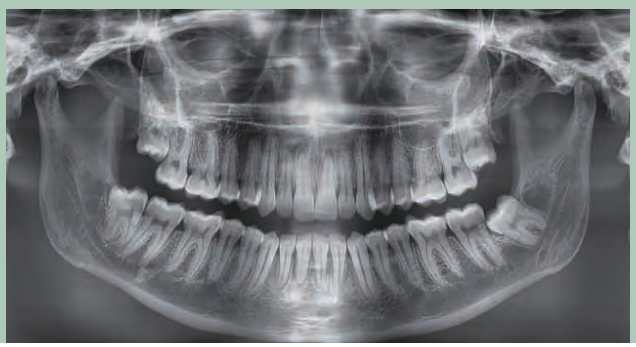
THE NEXT GREEN INNOVATION

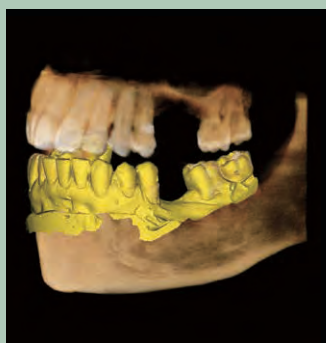
Green 16™

- **4-IN-1 DIGITAL** [PANO | CEPH | CBCT | MODEL]
- **MULTI FOV SELECTION**
- **GREEN SCAN TIME**
- **LOW DOSE AND HIGH IMAGE QUALITY**
- **THE ART-V**
- **3D SCANNING FOR MODEL**

ADVANCED 4-IN-1 DIGITAL X-RAY IMAGING SYSTEM

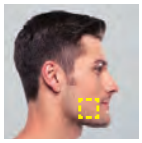
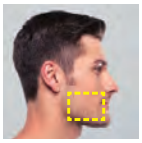
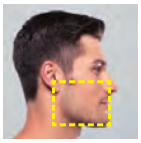
Green 16 is an advanced 4-in-1 digital X-ray imaging system that incorporates PANO, CEPH (Optional), CBCT and MODEL Scan.
It provides high quality images with lower radiation by combining imaging processing and accumulated experience in dental imaging from VATECH. This will improve your diagnostic accuracy with increased treatment planning and patient satisfaction.





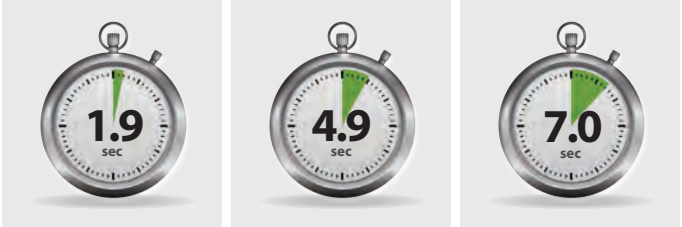
MULTI FOV SELECTION

Green 16 offers a range of selectable fields of view.
The Multi FOV enables the user to select the optimum FOV Mode and minimizes exposure to areas not in the region of interest. Select the proper FOV size among 16x9, 12x9, 8x9 and 5x5 based on a particular diagnostic need. It covers the full arch region, sinus and left/right TMJ and it suits most oral surgery cases as well as multiple implant surgeries.

Endo & Single implant	Arch	Dual Arch	Sinus & TMJ
5x5	8x9	12x9	16x9
			
Optimal size to cover 3~4 teeth through capturing ROI	Basic FOV size & select a left or right or center arch	Suitable for multiple implant surgeries	Optimal size for sinus & TMJ diagnosis

GREEN SCAN TIME

Green 16 minimizes motion artifact and enables faster workflow due to its scan time.
It produces superb diagnostic images, which will be a source of pride for any dental practice. Focusing on the highest quality of patient care, Vatech strives to improve the health and safety of your patients.

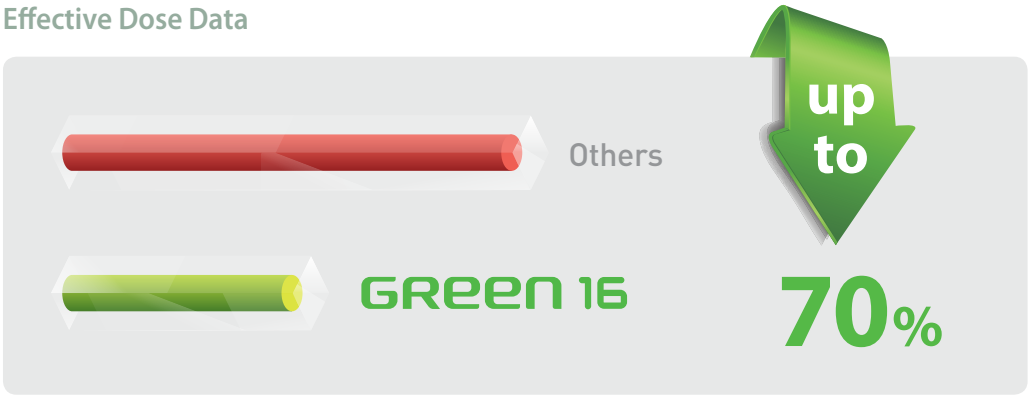


Ceph CBCT Pano

LOW DOSE AND HIGH IMAGE QUALITY

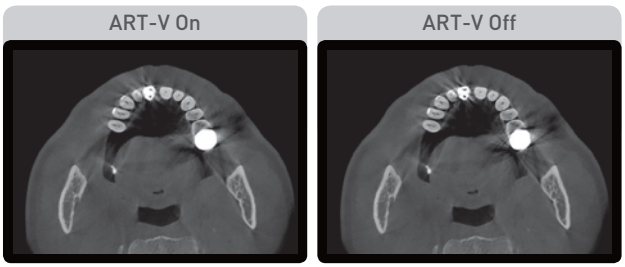
What has been developed at VATECH breaks many conventions in dental radiography.
It was always believed that with low radiation comes inferior image quality, which renders it useless in clinical diagnosis. However, Green 16 provides clinically diagnosable X-ray scans at a low X-ray dosage. With low dose X-ray radiography, achieving clinically diagnosable image quality is the new golden-standard.

Effective Dose Data



THE ART-V

Metal artifact hinders visualization and naturally reduces diagnostic confidence.
Clear image gives you less stress and more confidence which leads to accurate diagnosis for implant planning.



*ART-V is the new name of VATECH's MAR function.
(Artifact Reduction Technology of VATECH)

3D SCANNING FOR MODEL

3D model scan enables users to store plasters as digital models.

DIGITIZED ONE-STOP CLINIC

CAD/CAM integration
- Sufficient level of detail for surgical guide design

Specially designed Jig
- Stable protection from partial model to full model

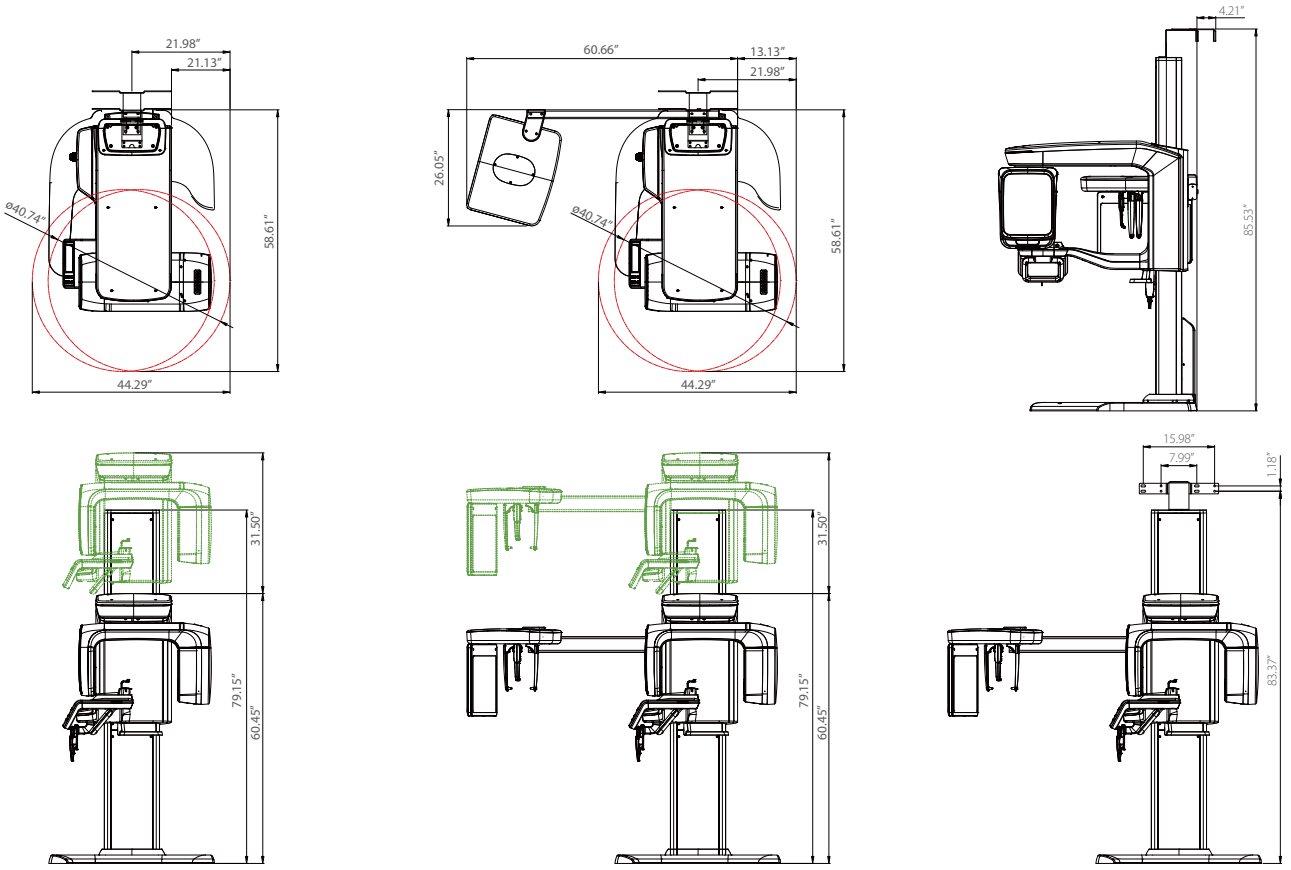
*3D scanning for Plaster Cast with FOV 8x9 (cm)

SPECIFICATIONS [Green 16 : **PHT-65LHS**]

Function	CT + Pano + Ceph + Model Scan	
Focal Spot Size	0.5 mm (IEC60336)	
CT FOV Size	5x5 / 8x9 / 12x9 / 16x9 cm	
Voxel Size	5x5	0.08 mm / 0.12 mm
	8x9	0.12 mm / 0.2 mm
	12x9	0.2 mm / 0.3 mm
	16x9	0.2 mm / 0.3 mm
Scan Time	Pano	14.1 sec / 7.0 sec
	Ceph	3.9 sec / 1.9 sec
	CBCT	9.0 sec (12x9 - 16x9) / 4.9 sec (5x5 - 8x9)
Gray Scale	14 Bit	
Tube Voltage / Current	60 - 99 kVp / 4 - 16 mA	
Weight	Without CEPH unit	295.4 lbs - without the Base
		412.3 lbs - with the Base
	With CEPH unit	350.5 lbs - without the Base
		467.4 lbs - with the Base
Dimensions	Without CEPH unit	44.29″ (L) x 58.61″ (W) x 91.94″ (H)
	With CEPH unit	73.78″ (L) x 58.61″ (W) x 91.94″ (H)

*The specifications are subject to change without prior notice.

DIMENSIONS



An additional 3 inches (76.2 mm) of space is required behind the unit for wall mount bracket installation (mandatory unless there is a base mount installation).

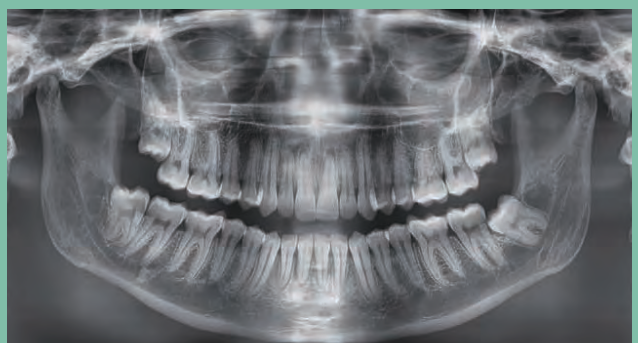
NEW GREEN INNOVATION

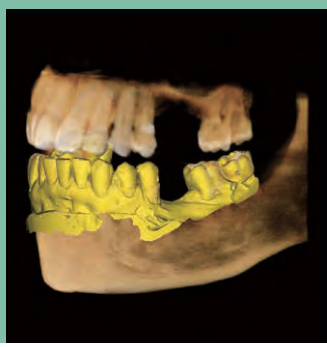
Green X™

- **4-IN-1 DIGITAL X-RAY IMAGING SYSTEM**
  [PANO / CEPH / CBCT / MODEL SCAN]
- **MULTI FOV SELECTION**
- **GREEN SCAN TIME**
- **ENDO MODE WITH HIGH RESOLUTION**
- **INSIGHT 2.0 FEATURE**
- **3D SCANNING FOR MODEL**

THE ADVANCED 4-IN-1 DIGITAL X-RAY IMAGING SYSTEM

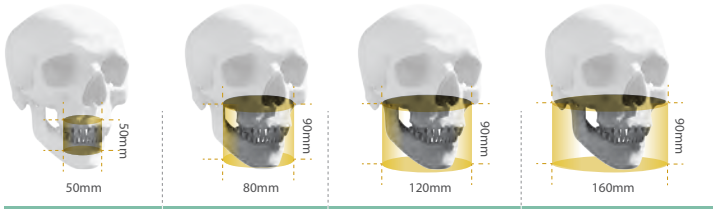
Green X is an advanced 4-in-1 digital x-ray imaging system that incorporates Pano, Ceph (optional), CBCT, and Model Scan. With Vatech's extensive experience in the dental imaging field, the Green X provides high-quality images with lower radiation by combining image processing. This will improve your diagnostic accuracy and lead to increased treatment planning and patient satisfaction.





MULTI FOV SELECTION

Green X offers a range of selectable fields of view. The Multi FOV option allows users to select the optimum FOV mode while minimizing exposure to areas that are not in the region of interest. The selection includes the following FOV sizes for diagnostic needs: 16x9, 12x9, 8x9, 8x5, 5x5 and 4x4. These options cover the full arch region, sinus and left/right TMJ, and suits most oral surgery cases and multiple implant surgeries.



	FOV 4x4/5x5	FOV 8x5/8x9	FOV 12x9	FOV 16x9
REGION	- Single tooth capture	- Central dentition - TMJ (R or L)	- Dual arch including sinus and nerve - TMJ (R or L)	- Back border of jaw (Ramus) - Dual arches back to the 3rd molars plus sinus - Central incisor to spine
CLINICAL IMPLICATION	- Implant single site - Endo - Perio - Complex impaction (3rd) - OMS - Supernumerary : Ortho	- Implantology - Guided Surgery - General Dentist - OMS - Orthodontics	- Surgical guides - Sinus lifts - Bone grafting - Bi lateral sinus augmentation	- Surgical Guides - Sinus lifts for both sinuses - Complex orthognathic cases - Simultaneous diagnosis for both TMJs

GREEN SCAN TIME

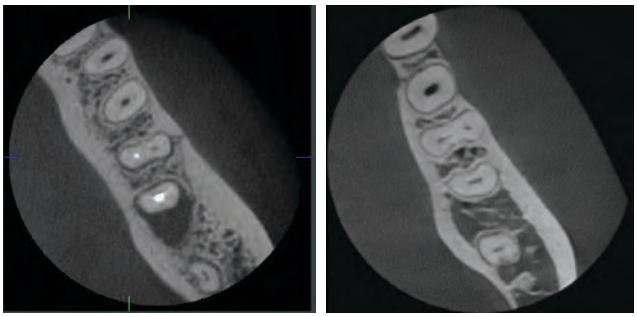
Due to its scan time, the Green X minimizes motion artifact and enables faster workflow. It produces superb diagnostic images, which will be a source of pride for any dental practice.
Focusing on the highest quality of patient care, Vatech strives to improve the health and safety of your patients.

Ceph CBCT Pano

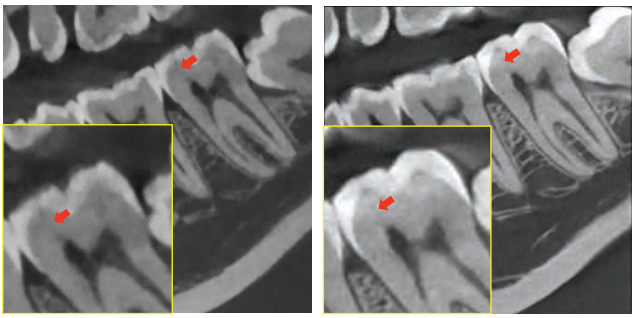
ENDO MODE WITH HIGH RESOLUTION

With its 4cm x 4cm volume mode and 49.5 micron voxel size, the Endo mode will optimize treatment of highly-focused regions of interest. It is ideal for endodontic use because the dentist is able to achieve an extraordinary image in a high-resolution voxel size.

DENTAL MODE VS. ENDO MODE

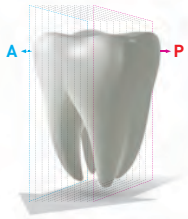


DENTAL MODE VS. ENDO MODE

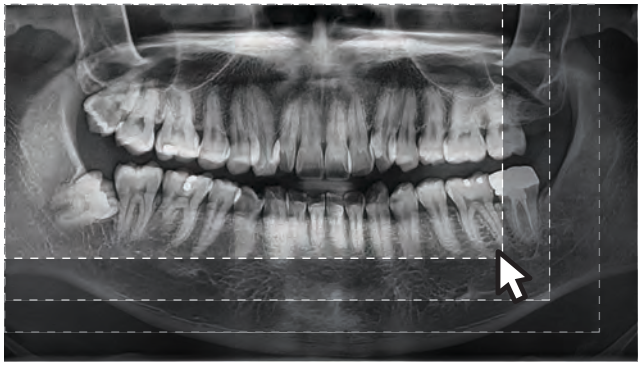


INSIGHT 2.0

The Insight Pan is capable of taking a multi-layered panoramic image, called an Insight Pan, which provides a unique in-depth look across a single focal trough. Insight 2.0 has an upgraded free FOV feature so you will be able to capture just the area of interest.



FREE FOV



3D SCANNING FOR MODEL

3D model scan enables users to store plasters as digital models.

DIGITIZED ONE-STOP CLINIC

CAD/CAM integration

• Sufficient level of detail for surgical guide design

Specially designed Jig

• Stable protection from partial model to full model

*3D scanning for Plaster Cast with FOV 8x9 (cm)

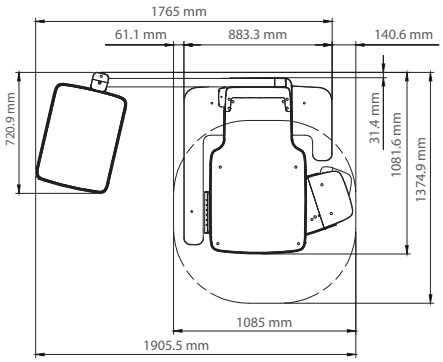
SPECIFICATIONS [Green X : **PHT-75CHS**]

Function	CT + Pano + Ceph + Model Scan	
Focal Spot Size	0.5 mm (IEC 60336)	
CT FOV Size	16x9 cm : 4x4, 5x5, 8x5, 8x8, 12x9, 16x9 cm	
Voxel Size	4x4	0.05 mm
	5x5	0.08 mm / 0.12 mm
	8x5 / 8x8	0.12 mm / 0.2 mm
	12x9 / 16x9	0.2 mm / 0.3 mm
Scan Time	Pano	4.0 sec / 14.1 sec
	Ceph	1.9 sec / 4.9 sec
	CBCT	2.9 sec / 9.0 sec
Gray Scale	14 Bit	
Tube Voltage / Current	60 - 99 kVp / 4 - 16 mA	
Weight	Without CEPH unit	162.9 kg (359.13 lbs - without Base)
		217.9 kg (480.38 lbs - with Base)
	With CEPH unit	187.9 kg (414.25 lbs - without Base)
		242.9 kg (535.50 lbs - with Base)
Dimensions	With CEPH unit	1905.5 mm (L) x 1374.9 mm (W) x 2315.4 mm (H) - without Base
		1905.5 mm (L) x 1374.9 mm (W) x 2345.4 mm (H) - without Base
	Without CEPH unit	1085.0 mm (L) x 1343.5 mm (W) x 2315.4 mm (H) - without Base
		1085.0 mm (L) x 1343.5 mm (W) x 2345.4 mm (H) - with Base

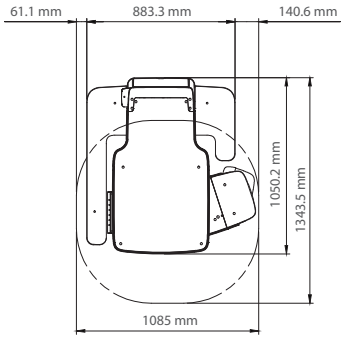
*The specifications are subject to change without prior notice.

DIMENSIONS [Unit: mm]

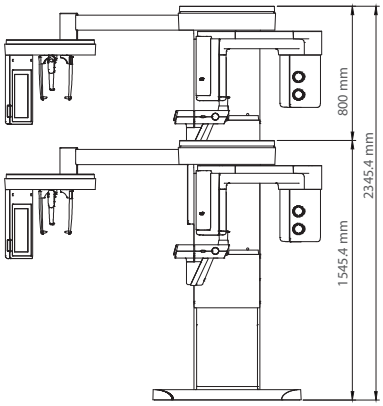
WITH CEPH



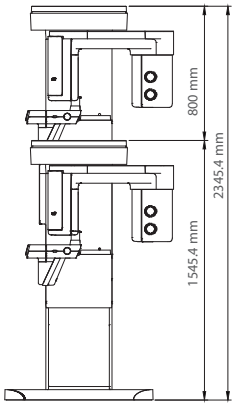
WITHOUT CEPH



TOP VIEW



FRONT VIEW



An additional 3 inches (76.2 mm) of space is required behind the unit for wall mount bracket installation (mandatory unless there is a base mount installation).

RAISING THE BAR FOR EXCELLENCE

Green 21™

LARGE 21X19 FOV FOR COMPLETE DIAGNOSTIC IMAGING NEEDS

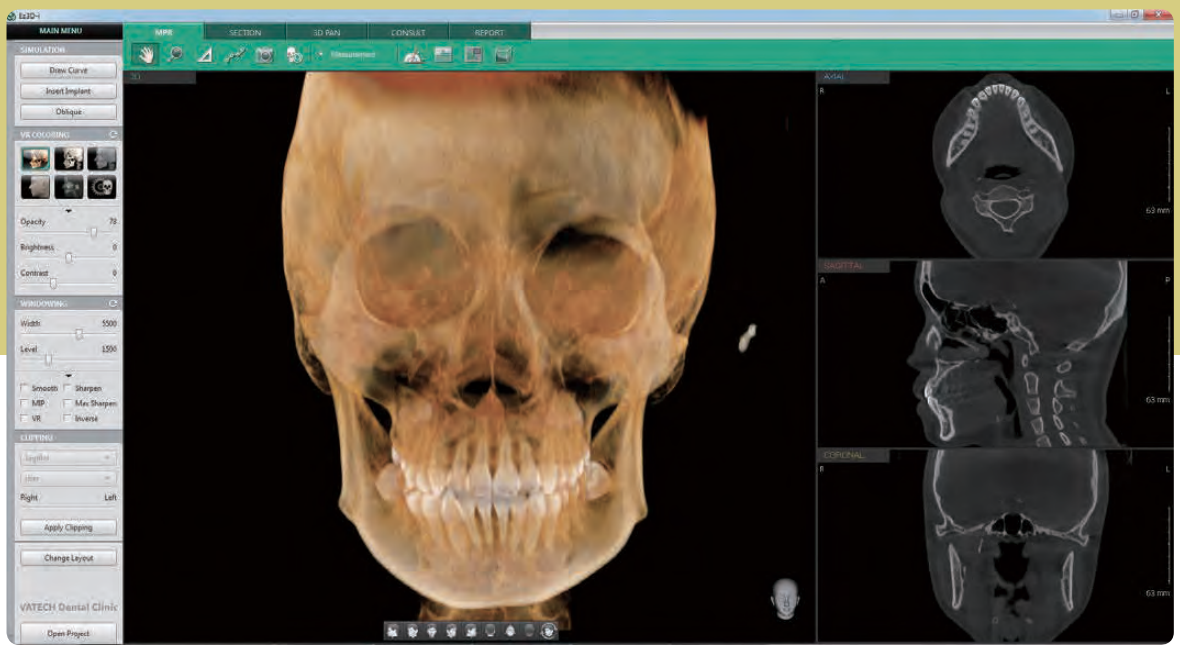
THE OPTIMAL SOLUTION FOR AIRWAY AND ENT DIAGNOSIS

AUTOMATICALLY GENERATES UP TO 6 TYPES OF IMAGES IN 1 SCAN

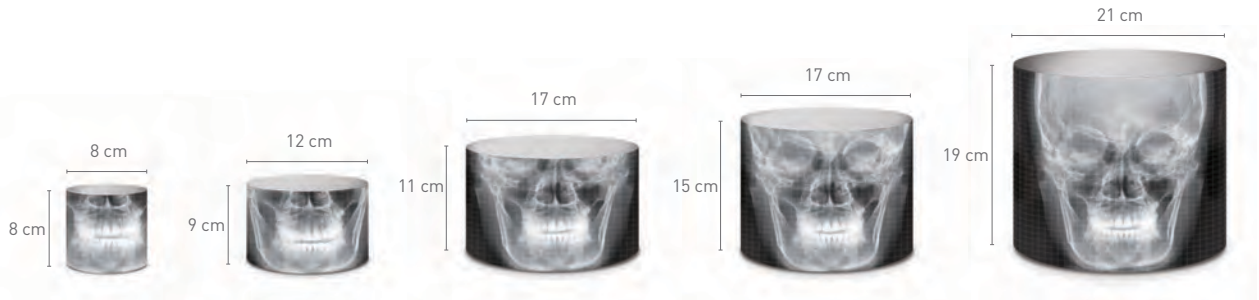
THE MOST SUITABLE FOV SIZE FOR A COMPLETE DIAGNOSIS

A 21X19 FOV is the optimal size for oral maxillofacial surgeons and orthodontists. Anatomically, it captures the regions from the roof of the orbits and nasion down to the hyoid bone.

- Oral and maxillofacial surgery
- Facial reconstructions
- Orthodontic treatment planning
- Complex orthognathic cases



The Green 21 utilizes a proprietary 49.5 µm high resolution X-ray sensor which makes it the finest pixel and highest resolution CBCT available on the market today.



[Multi FOV]

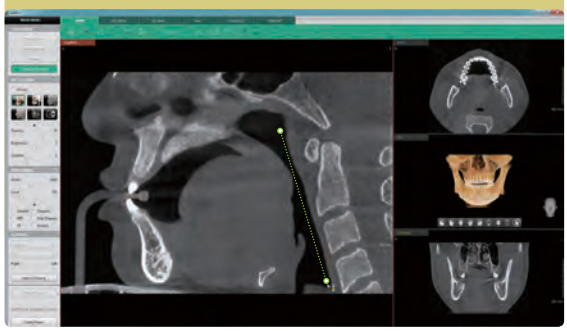
The Green 21 offers a wide range of selectable Fields of View (FOV).
This selectable FOV helps limit patient radiation exposure, and allows users to capture only the region of interest.
Clinicians can select between 21X19, 17X15, 17X11, 12X9 and 8X8 fields of view.

THE OPTIMAL SOLUTION FOR AIRWAY AND ENT DIAGNOSIS

The Green 21 provides an ENT mode (Airway/TB&PNS) for ENT specialists.
The fields of view are based on patients' most common cases such as cholesteatoma, chronic sinusitis, and sleep apnea.

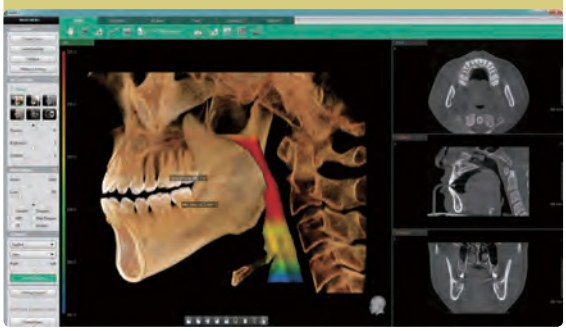
[Airway] A Powerful Function for Airway Volume Analysis

Simple Airway Selection



- 2-click airway region selection

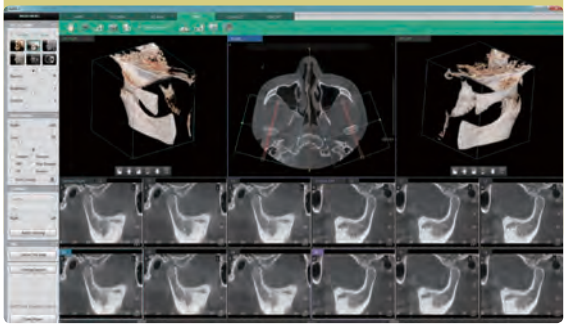
Automatic Airway Volume Measurement



- Segmented airway volume and color coded thickness measurements
- Automatically calculated total volume and minimum area measurements

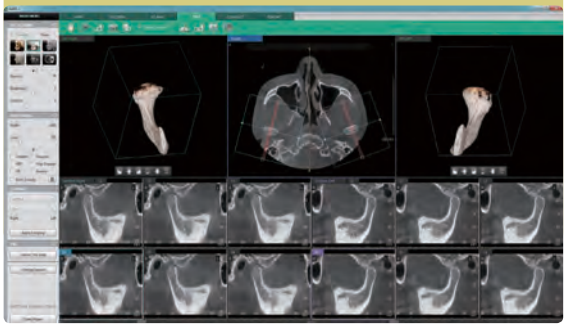
[TMJ] Simultaneous Analysis for both TMJ

TMJ Navigator



- Instant auto cross-sectional images

TMJ Segmentation



- Separate condyle or fossa
- Rotation for an accurate diagnosis
- Easily segment and separate the Condyle or Fossa

*Airway & TMJ analysis available on Ez3D-i V4.1

AUTOMATICALLY GENERATES UP TO 6 TYPES OF IMAGES IN 1 SCAN

One scan with the Green 21, you can capture the raw data needed for a CBCT, Panorama, PA Ceph, Lateral Ceph, SMV Ceph and Waters' View Ceph.
With these images, the system is capable of providing images for craniofacial, maxillofacial and orthodontic treatment planning.

VALUE-ADDED AUTO IMAGE SELECTION

Select the image type needed for your treatment plan.

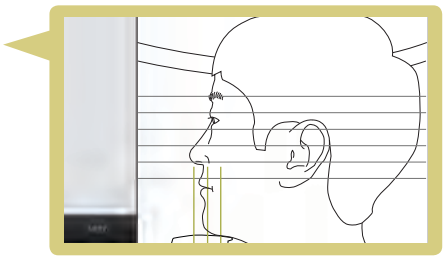
* Conventional Panorama mode is included.

Green 21™

Green 21 is a multi-modality CBCT, with the most comprehensive set of FOV sizes collimated from 21X19 to 8X8, and provides a whole array of diagnostic tools to clinicians.

Simple Patient Positioning

The step-by-step instructions shown on the LCD control panel aids in patient positioning.



Space Efficiency

The built in accessory box reduces clutter and keeps the space organized.

Posture Stability

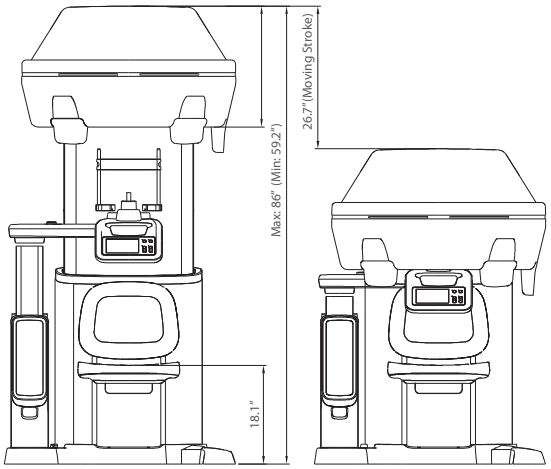
Maximize patient stability by utilizing a seated position.

Wheelchair Accessibility

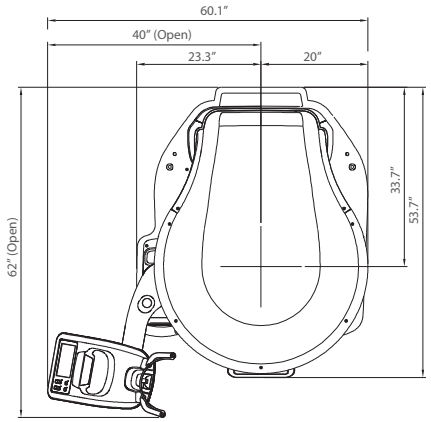
A detachable chair accommodates wheelchair access.

DIMENSIONS

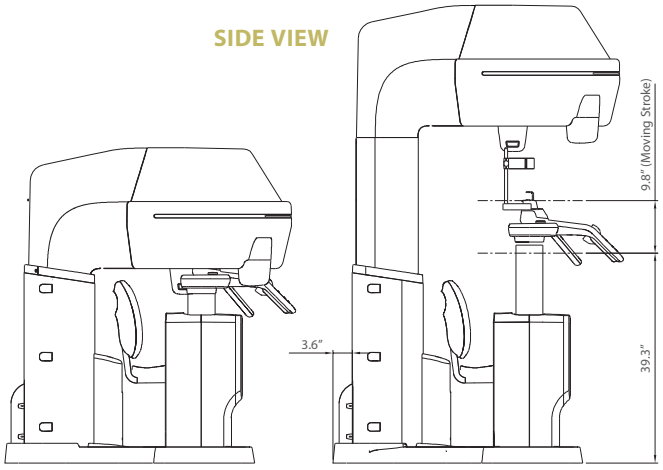
FRONT VIEW



TOP VIEW



SIDE VIEW



SPECIFICATIONS [Green 21 : **PCT-90LH**]

Function	CT (Auto Pano/Auto Ceph) + Pano	
CT FOV Size	Dental	21x19 / 17x15 / 12x9 / 8x8 cm
	ENT	21x19 / 17x11[TB&PNS] / 17x11[Airway] cm
Scan Time	Pano	13.5 sec
	CT	Max. 18 sec
Voxel Size	0.2 / 0.3 / 0.4 mm	
Focal Spot Size	0.5 mm [IEC60336]	
Gray Scale	14 bit	
Tube Voltage	60 - 120 kV	
Current	4 - 10 mA	
Weight	321 kg (708 lbs)	
Dimensions	62"(L) x 60.1"(W) x 86"(H)	

• The specifications are subject to change without prior notice.

Ez3D-i

CUTTING-EDGE SOFTWARE FOR CUTTING-EDGE DIAGNOSTICS

Powered by a new 3D VR graphics engine, Ez3D-i is the ideal tool to quickly and easily obtain the correct perspectives needed for accurate, true-to-measurement diagnosis.

Quick and Easy **Dental 3D Imaging Software** for Every Dentist

PROVIDES QUICK AND ACCURATE DIAGNOSTIC TOOLS

- Various VR coloring modes and 2D filters
- Intuitive implant simulation tools
  - Collision Detection (implant/Canal)
  - Bone Density Verification
  - Oblique Viewing Tools
- 3D Panoramic Navigation
- 2-Click Airway Analysis
- Multiple Sectional Curves and Segmentation Tools

CONSULTATION MODES INCLUDED

- Presentation Mode
- Over 200 Consultation Videos
- Easy to capture diagnosis image
- 3D Panorama

Supports Various VR Coloring modes

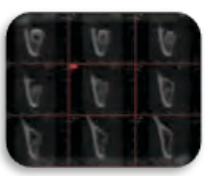
- Teeth Mode
- Bone Mode
- Soft-Tissue Bone Mode
- MIP Mode
- Soft-Tissue Mode

Virtual Consultation Tool

- Over 200 consultation videos
- Creation of personalized consultation material

Implant Simulation

- 3 Click Implant Simulation
- Collision Detection
- Bone Density
- 3D Panorama
- Oblique View Mode

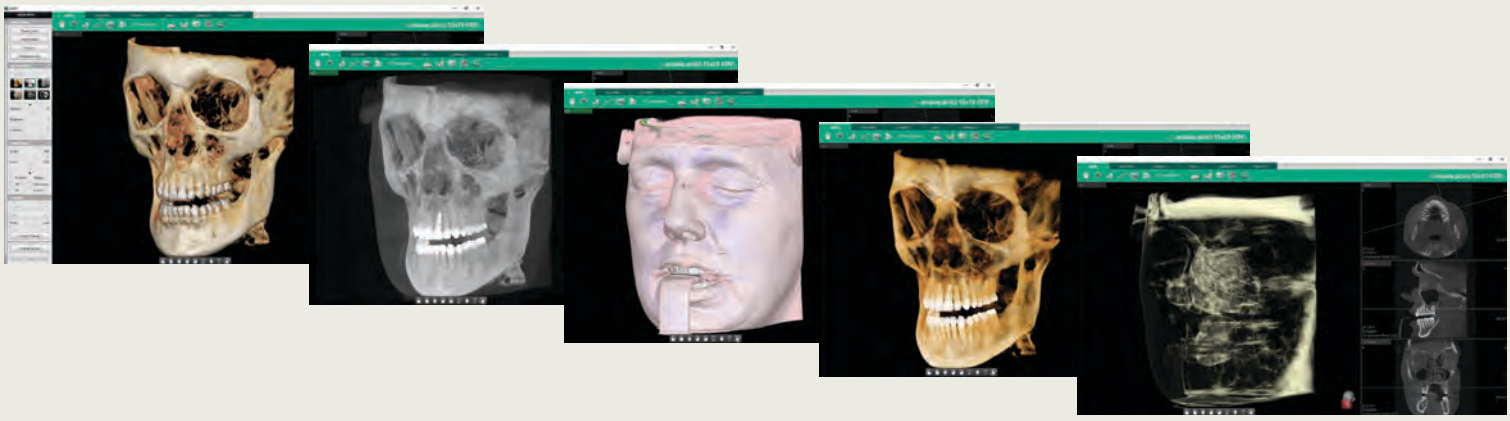


Provides Quick and Accurate Cross-Section

- 8 Multi-Section(Curve) Management
- One-Click Cross Section (3D PAN tab)
- Canal Drawing

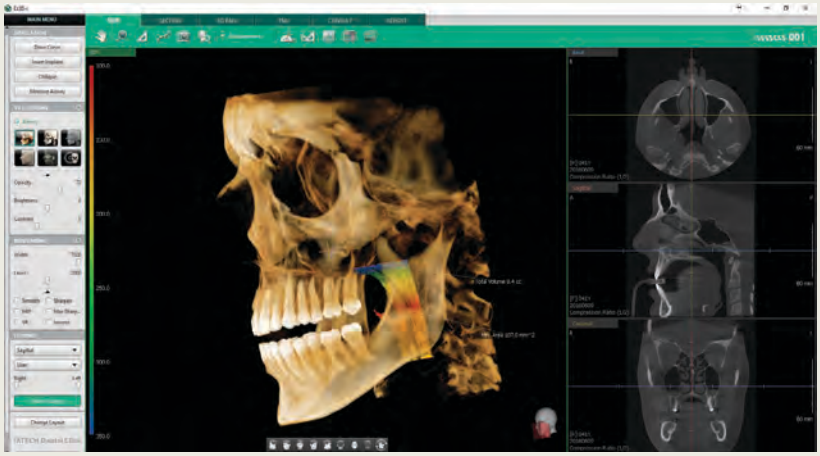
VARIOUS VR COLORING MODES AND 2D FILTERS

• Quick and easy switch between multiple VR views



2-CLICK AIRWAY ANALYSIS

• With two clicks, obtain the volume and minimum axial area of an airway for efficient airway diagnosis



FEATURING VATECH'S VIRTUAL CONSULTATION TOOL

• With over 200 unique animations, VCT gives you the tools to not only educate patients on treatment plans, but also to show how this plan is relevant to their specific case

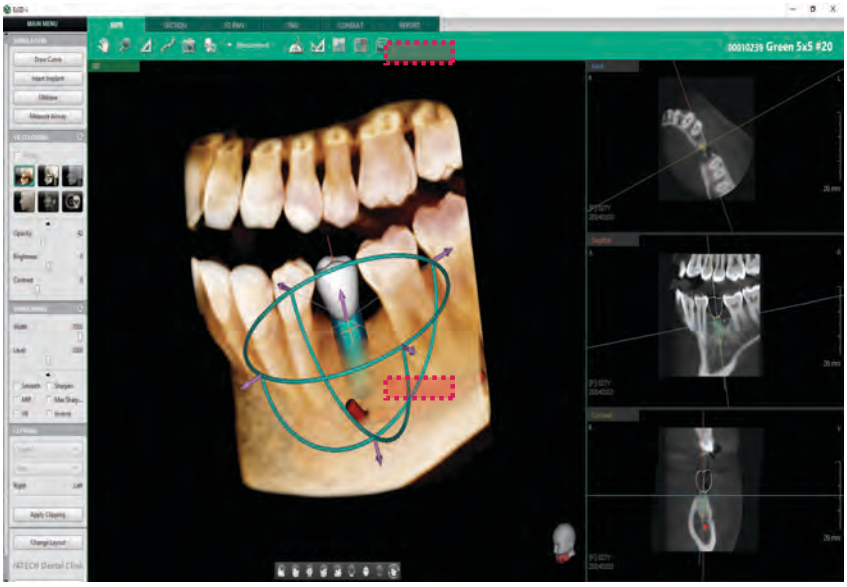
3D PANORAMIC NAVIGATION

- Easily navigate and obtain a sectional view by utilizing our new and intuitive 3D panoramic navigation mode
- Simply click and drag our viewing window over the 3D panorama to obtain a sectional view of that region
- Angulation made easy

By clicking 3D Navigator and positioning to ROI, it's easy to verify 2D sectional images

IMPLANT SIMULATION

- Available in all viewing modes in Ez3D-i (MPR/Section/3DPan)
- Colorized bone density viewing modes available
- Adjustable automatic implant collision detection function between multiple implants and/or nerve canal



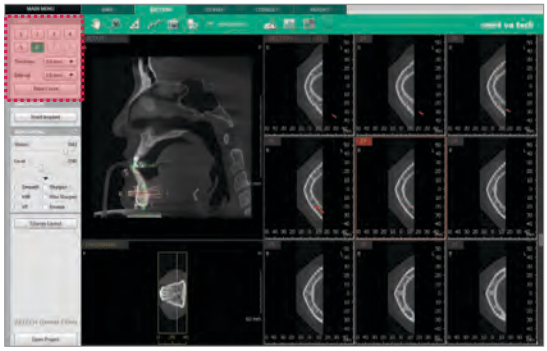
MPR tab

SECTION tab

3D PAN tab

MULTI-CURVE MANAGEMENT

- Draw sectional curves from either the MPR View or Sectional View
- Easily manage and up to 8 different sectional curves
- Intuitive click-and-drag sectional view manipulation



EzDent-i

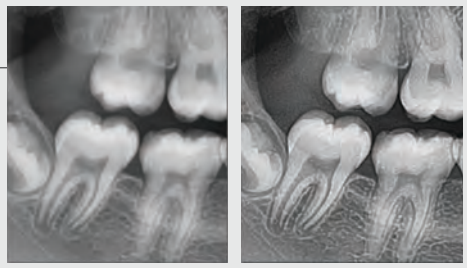
THE WORLD'S FIRST CLINICAL IMAGING & PATIENT CONSULTATION SOLUTION

Featuring... Vatech's Virtual Consultation Tool (VCT)

With over 200 unique animations, VCT gives you the tools to not only educate patients on treatment plans, but also to show how this plan is relevant to their specific case.

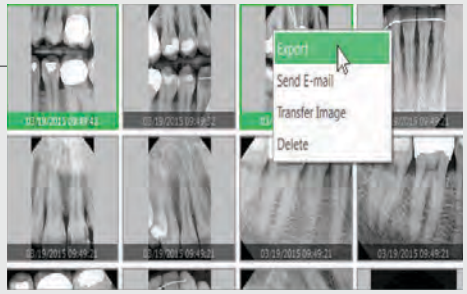
Get The Most Out Of Your Images

Using our revamped Sharpening and Max Sharpening Tool, enhance the quality of your images even further than ever before.



Manage Your Images, The Easy Way

Organize and export your images quickly and efficiently and avoid complicated procedures and training using EzDent-i's intuitive Click-And-Drag based interface.



EzRay Air™ Portable

WEIGHT INNOVATION

WORLD'S FIRST CNT PORTABLE X-RAY

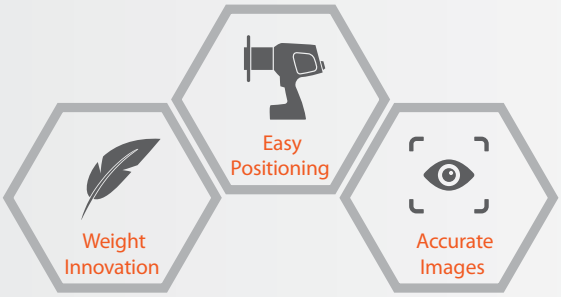
FASTER WORKFLOW

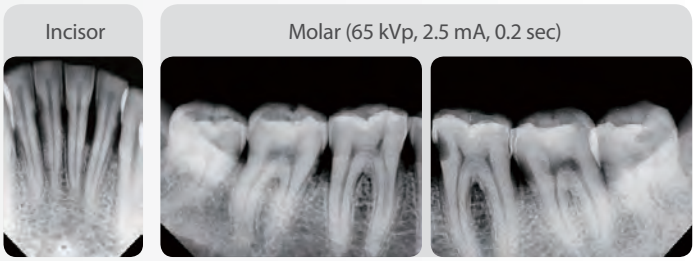
WEIGHT INNOVATION

CNT (CARBON NANO TECHNOLOGY)

WEIGHT INNOVATION WITH CNT (CARBON NANO TECHNOLOGY)

The world's first dental application of Carbon Nano Technology.
The EzRay Air Portable is a lightweight portable X-ray device designed for easy handling and stable positioning for optimal image quality on your intra-oral X-rays.





DOUBLE SCATTER SHIELD DESIGN FOR OPERATOR SAFETY

INTERNAL SHIELDING

The internal radiation shielding is perfectly designed to protect the operator from radiation leakage.

EXTERNAL BACKSCATTER SHIELDING

Exposure to radiation results from the beam interacting with the surface of the patient, causing radiation to bounce off as radiation scatters in different directions. The backscatter shield significantly reduces the amount of radiation being reflected.

LOWER COOLDOWN TIMES, FASTER WORKFLOW

Due to unique efficiencies in carbon-nano technology which aren't available in traditional X-ray generation methods, the EzRay Air Portable has almost a 75% reduction in cooldown time between shots when compared to leading competitive devices. This allows users to spend less time waiting for their X-ray to be ready and more time in treatment, diagnosis and patient.

NO WARMUP TIME

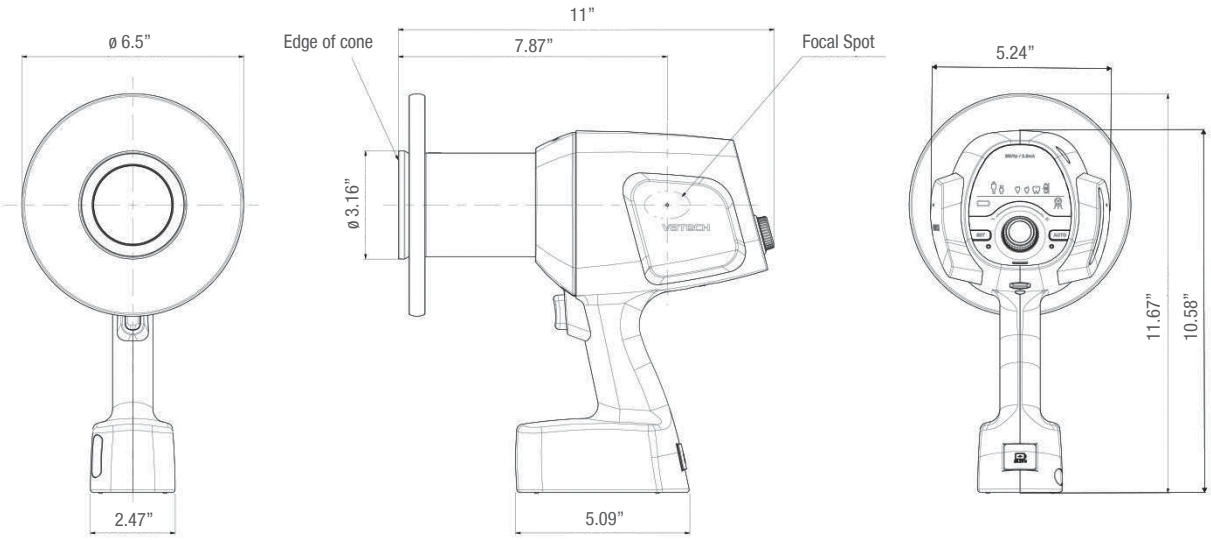
With no initial start up delay for conventional X-ray sources to warm up, the EzRay Air Portable's Carbon Nano Technology allows for quicker exposure after you initially turn on the device, allowing for optimal workflow.

SPECIFICATIONS [EzRay Air Portable: **VEX-P300**]

Focal Spot	0.4 mm (IEC 60336)
Tube Voltage (kV)	65 kV
Tube Current (mA)	2.5 mA
Exposure Time Range	0.05 ~ 0.5 sec
Total Filtration	Min. 1.5 mm Al
Source to Skin Distance	200 mm
X-ray Field	**Default:** 60 mm Round, 30 x 40 mm Rectangular / **Optional:** 20 x 30 mm Rectangular
Maximum duty cycle	1 : 30
Power Input	22.2 V
Weight	4.19 lbs.

* The specifications are subject to change without prior notice.

DIMENSIONS



EzRay Air™ Wall

WEIGHT INNOVATION

WALL-MOUNTED INTRAORAL X-RAY

WEIGHT INNOVATION WITH CNT (CARBON NANO TECHNOLOGY)

Wall mounted EzRay Air Wall is a lightweight X-ray device designed for easy handling and stable positioning for optimal image quality on your intra-oral X-rays.

The EzRay Air Wall's lightweight tube head provides users with a stable and easy to use X-ray source which maximizes image clarity and optimizes work-flow.

SMART DIAL FOR ALL FUNCTIONS

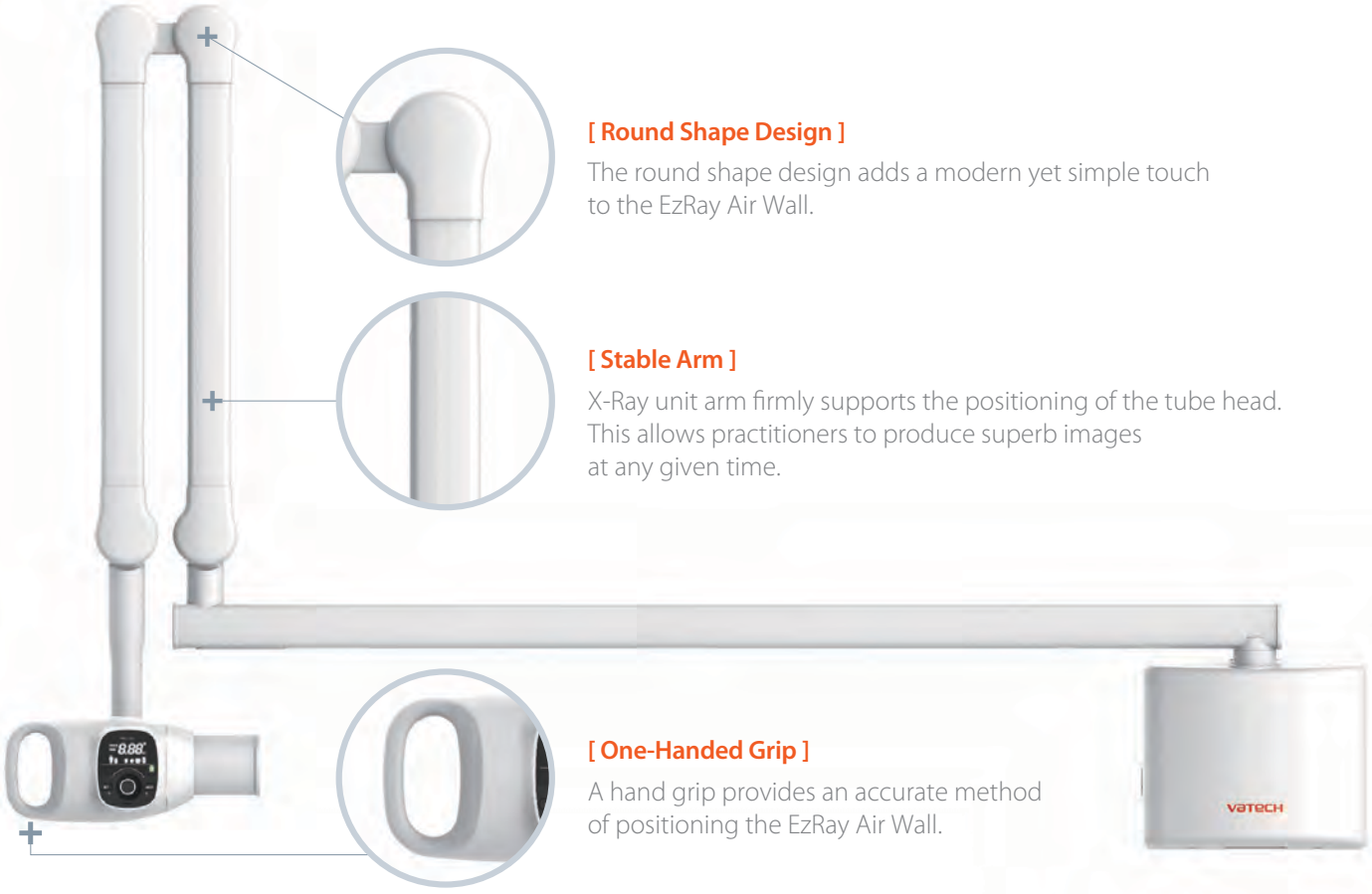
The operating panel located on the tube head creates a much simpler and much faster work-flow. Using the Smart dial, practitioners will notice a decrease in preparation time and there would be no need to remember complicated control buttons and configurations.

SECURE CLEAR IMAGES WITH A 0.4MM FOCAL SPOT

Compared to other intraoral sensors in the market, the EzRay Air Wall provides optimal image quality and additional diagnostic value with a 0.4mm focal spot.

* Exposure Condition : 65kV, 3.0mA

ERGONOMIC DESIGN



[Round Shape Design]

The round shape design adds a modern yet simple touch to the EzRay Air Wall.

[Stable Arm]

X-Ray unit arm firmly supports the positioning of the tube head. This allows practitioners to produce superb images at any given time.

[One-Handed Grip]

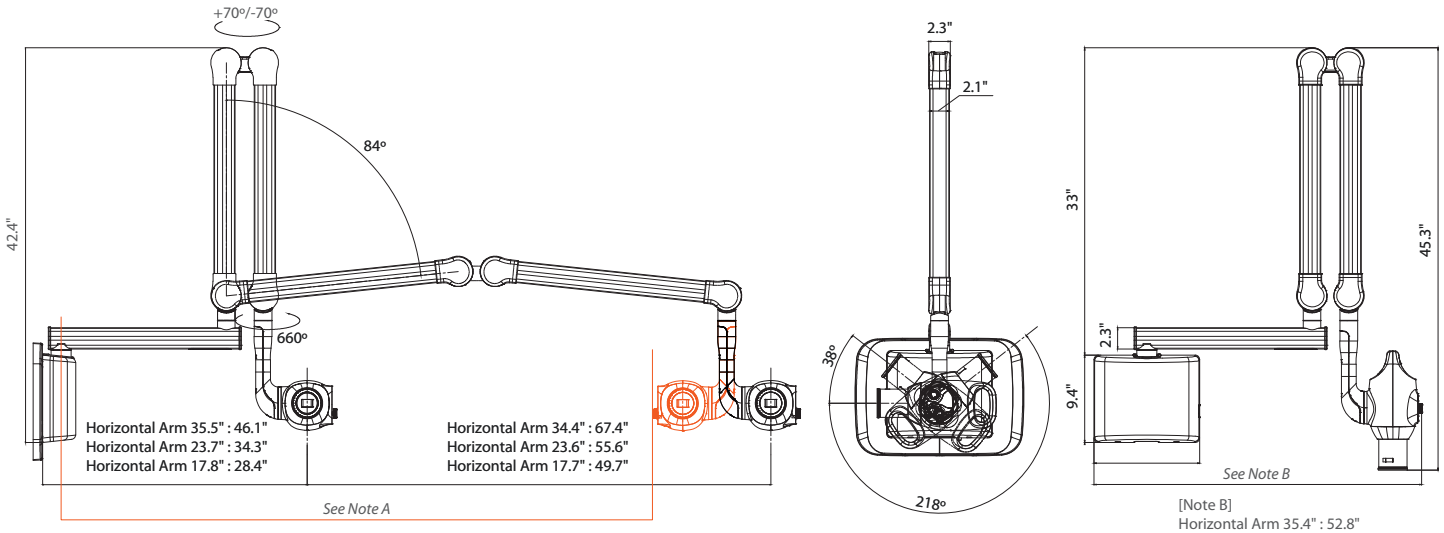
A hand grip provides an accurate method of positioning the EzRay Air Wall.

SPECIFICATIONS [EzRay Air Wall : **VEX-S300W]**

Focal Spot	0.4 mm (IEC 60336)
Tube Voltage	65 kV
Tube Current	3.0 mA
Exposure Time Range	0.05 ~ 0.5 (0.01s increment)
Source to Skin Distance	Min. 7.9 inch
X-ray Field	**Default:** : 60 mm Round, 30x40 mm Rectangular / **Optional:** 20x30 mm Rectangular
Arm Length [Option]	62"/ 68"/ 80" *See note A
Accessories	Remote Exposure Switch (Hand Switch / Doorbell Switch)
Weight	56.9 lb (Arm Length 62")
	58.0 lb (Arm Length 68")
	61.1 lb (Arm Length 80")

* The specifications are subject to change without prior notice.

DIMENSIONS [Unit: inch]



[Note A]
17.7" Horizontal Arm 62.4" / 23.6" Horizontal Arm 68.3" / 35.4" Horizontal Arm 80.1" with 8" cone

[Note B]
Horizontal Arm 35.4" : 52.8"
Horizontal Arm 23.6" : 41"
Horizontal Arm 17.7" : 35.1"

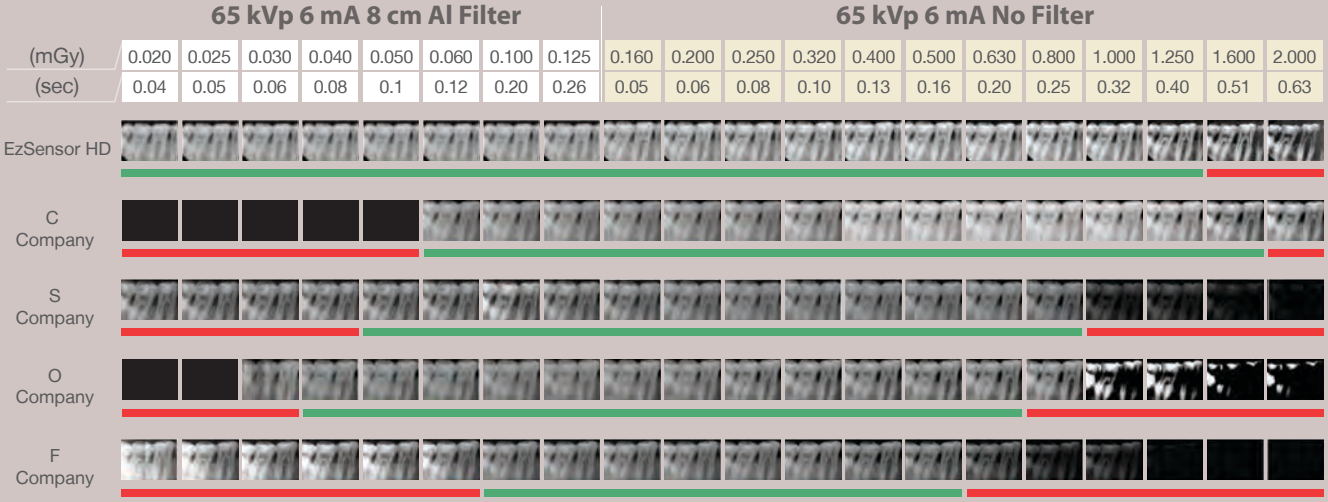
REDEFINING INTRAORAL SENSORS

EzSensor HD™

- EXPERIENCE THE HIGHEST RESOLUTION
- VATECH QUALITY AND DESIGN
- NEW CONTRAST FILTERS FOR YOUR PERFECT IMAGE
- DIRECT INTERFACE WITH USB 3.0

EXPERIENCE THE HIGHEST RESOLUTION

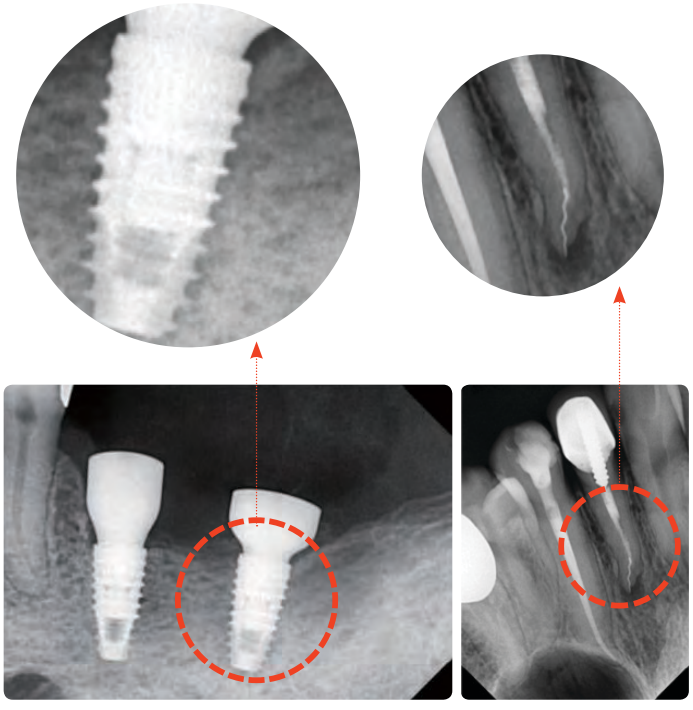
The EzSensor HD is clinically usable at a wide range of exposure settings and is more consistent than all of the other sensors in the market. Practitioners benefit from reducing exposure-related retakes and finding it less time consuming. Also, patients benefit from the reduction of radiation exposure. With our high sensitivity sensor, you can capture diagnosable images under any condition, even when using an old X-ray source.



VATECH QUALITY AND DESIGN

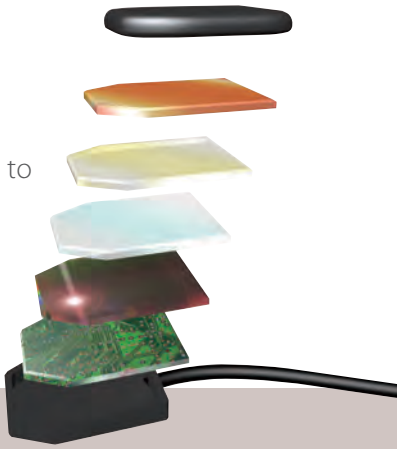
With a theoretical resolution of 33.78 lp/mm, the EzSensor HD provides high resolution images needed for accurate diagnosis.

New noise and artifact reduction image processing provides clear and consistent images, making the EzSensor HD one of the easiest to use in the market today.



4.8 MM ULTRA-SLIM DESIGN

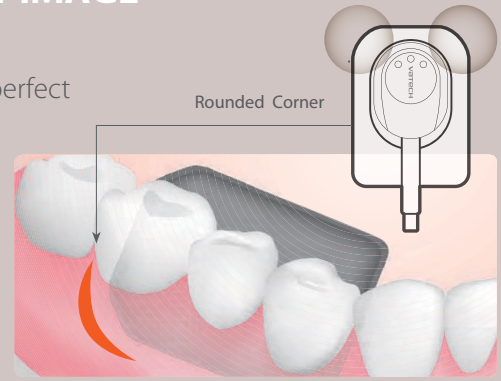
The EzSensor HD features one of the thinnest CMOS sensors in the world, making it easy to position within the patient's mouth.
Current sizes available are 1,0, 1.5, and 2.0. The EzSensor HD also provides the correct sizing options for optimal patient comfort and positioning.

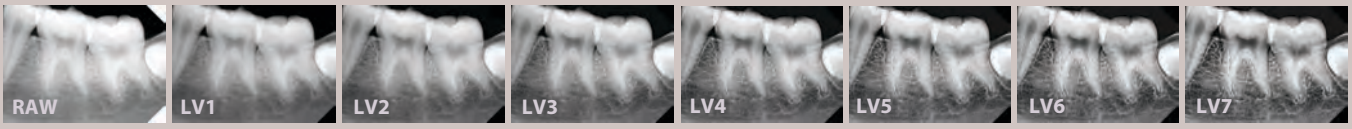


NEW CONTRAST FILTERS FOR YOUR PERFECT IMAGE

Quick and easy switch between seven new contrast filters to find your perfect diagnostic image. Higher contrast filters can be utilized for periodontics, while lower contrast filters can be used for detection and restorative dentistry,

With the EzSensor HD, you always have these filters at your disposal.





SPECIFICATIONS (EzSensor HD : IOS-U10IF / IOS-U15IF / IOS-U20IF / IOS-U10VF / IOS-U15VF / IOS-U20VF)

Detector	CMOS
Pixel Size	14.8 µm
Theoretical Resolution	33.78 lp/mm
Dynamic Range	12 bit
Active Area (WxL)	Size 1.0 : 20X30 mm Size 1.5 : 24X33 mm Size 2.0 : 26X36 mm
Dimensions (WxLxT)	Size 1.0 : 25.4X36.8 mm (1.00"X1.45") Size 1.5 : 29.2X39.5 mm (1.14"X1.55") Size 2.0 : 31.3X42.9 mm (1.23"X1.69")
Thickness	4.8 mm (0.19")
Cable Length	2.7 m

* The specifications are subject to change without prior notice.

[Intended use]

An EzSensor HD is intended to collect dental x-ray photons and convert them into electronic impulses that may be stored, viewed and manipulated for diagnostic use by dentists.

EzSensor Classic™

EASY DIAGNOSIS AND GREAT EXPERIENCE WITH EZSENSOR CLASSIC

EzSensor Classic consistently provides high resolution and clear images for accurate diagnosis and treatment planning.

VARIOUS SIZES (1.0 / 1.5 / 2.0)

Select the right sized sensor from the three size options to increase patient comfort.

ERGONOMIC DESIGN

The EzSensor Classic has a slim design with rounded corners for easy positioning to ensure patient comfort.

Square Corner Rounded Corner

DURABILITY

The EzSensor Classic's unique design makes itself extremely durable. The exterior is made of rugged aluminum and the interior is designed to absorb the external shock. Furthermore, a reinforced, flexible cable attachment protects the sensor from excessive bending.

SPECIFICATIONS (EzSensor Classic : IOS-U10IB / IOS-U15IB / IOS-U20IB / IOS-U10VB / IOS-U15VB / IOS-U20VB)

Detector	CMOS
Pixel Size	29.6 μm
Theoretical Resolution	17 lp/mm
Dynamic Range	12 bit
Active Area (WxL)	Size 1.0 : 20X30 mm Size 1.5 : 24X33 mm Size 2.0 : 26X36 mm
Dimensions (WxLxT)	Size 1.0 : 25.4X36.8 mm (1.00"X1.45") Size 1.5 : 29.2X39.5 mm (1.14"X1.55") Size 2.0 : 31.3X42.9 mm (1.23"X1.69")
Thickness	4.8 mm (0.19")
Cable Length	2.7 m

* The specifications are subject to change without prior notice.

[Intended use]

Intra-Oral Sensor is intended to collect dental x-ray photons and convert them into electronic impulses that may be stored, viewed and manipulated for diagnostic use by dentists.

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