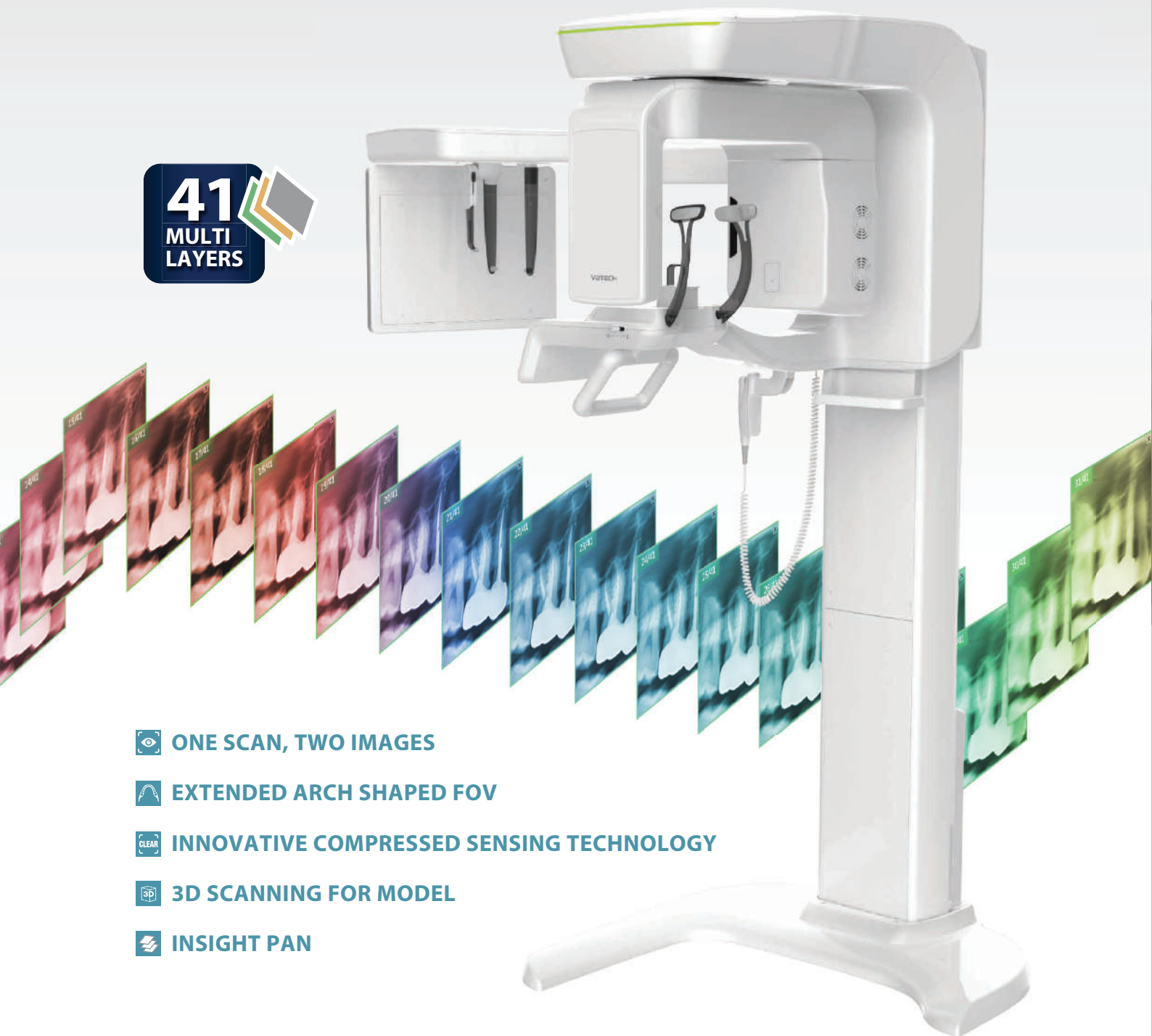# Smart Plus ™

41 MULTI LAYERS

- ONE SCAN, TWO IMAGES
- EXTENDED ARCH SHAPED FOV
- INNOVATIVE COMPRESSED SENSING TECHNOLOGY
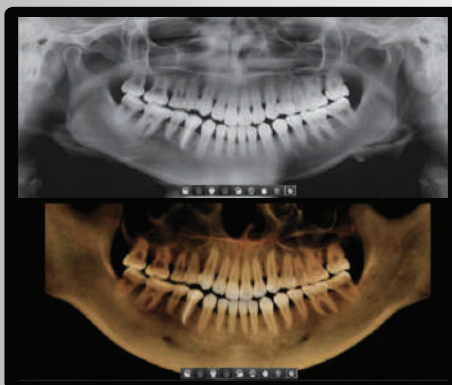- 3D SCANNING FOR MODEL
- INSIGHT PAN

SMART INNOVATION

◉ ONE SCAN, TWO IMAGES

One scan with the Smart Plus 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 one viewer.

2D

3D

* 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.

EXTENDED ARCH SHAPED FOV

The innovative FOV of the Smart Plus provides an arch-shaped volume, which shows a wider view of the dentition compared to other devices of the same FOV. When a tooth is lying on its side, there is a high possibility that the tooth will be cut out of the image. The "arch-shaped volume" eliminates this possibility and shows the hidden dentition area.
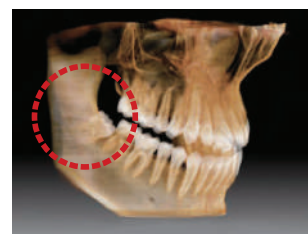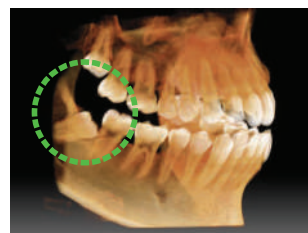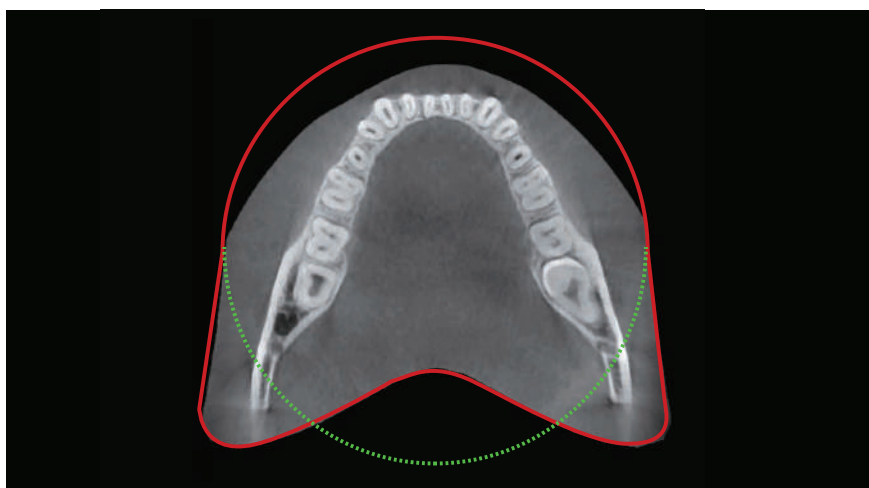
INNOVATIVE COMPRESSED SENSING TECHNOLOGY

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

Normal Image Reconstruction

SMART Image Reconstruction
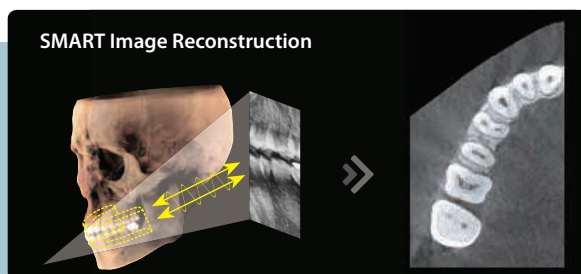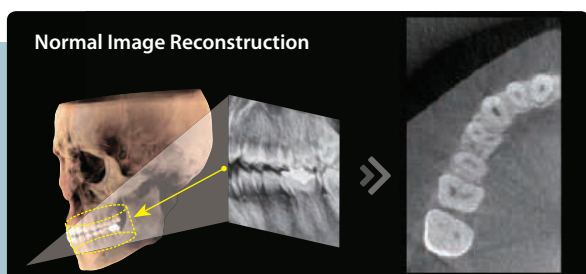
3D SCANNING FOR MODEL

3D model scanning 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 platform from partial model to full model scanning
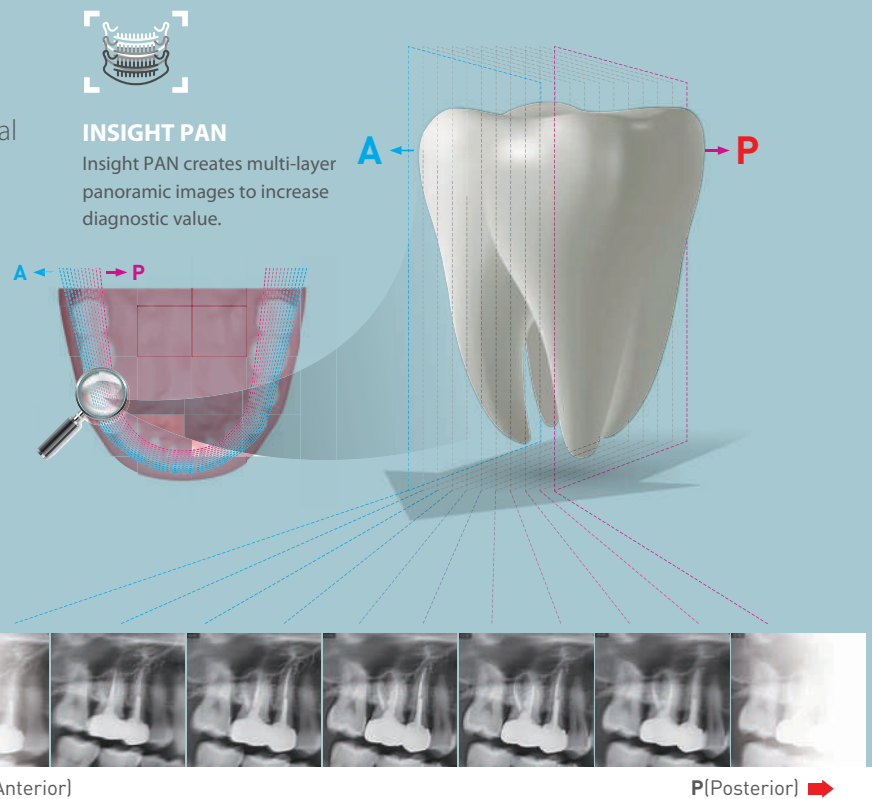
* 3D scanning for Plaster Cast with FOV 10x8.5 (cm)

ADVANCED IMAGE SOLUTION WITH INSIGHT PAN

The next evolutionary step forward in panoramic imaging.

The Smart Plus 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.

Since 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, ensuring that all details are captured in a depth-added panoramic image.

INSIGHT PAN
Insight PAN creates multi-layer panoramic images to increase diagnostic value.

A
P

A(Anterior)   P(Posterior)

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 workflow while providing the highest quality digital images.
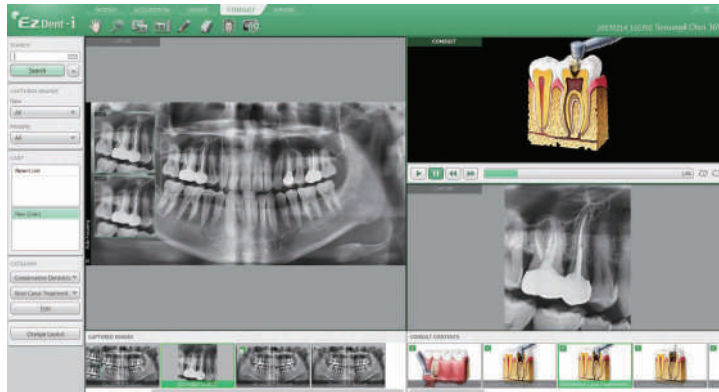
GREAT CLINICAL CARE WITH
RAPID CEPH TECHNOLOGY

RAPID CEPH

1.9 sec

1.9 sec

EZDENT-I: QUICK AND EASY DENTAL IMAGING SOFTWARE

EzDent-i provides a wide array of functions designed to streamline the dental practice's workflow.
It conveniently provides tools for 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 content

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 them the capability to find mesiobuccal, distobuccal, and even palatal root information.
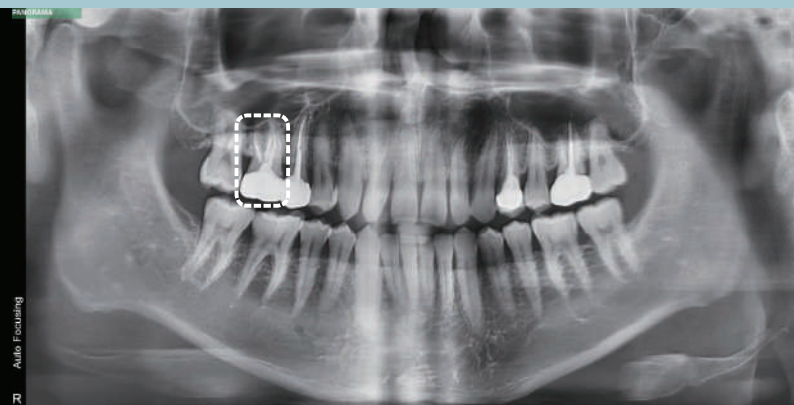
STANDARD PANORAMA

INSIGHT FEATURE

Check #3 Root Palatal
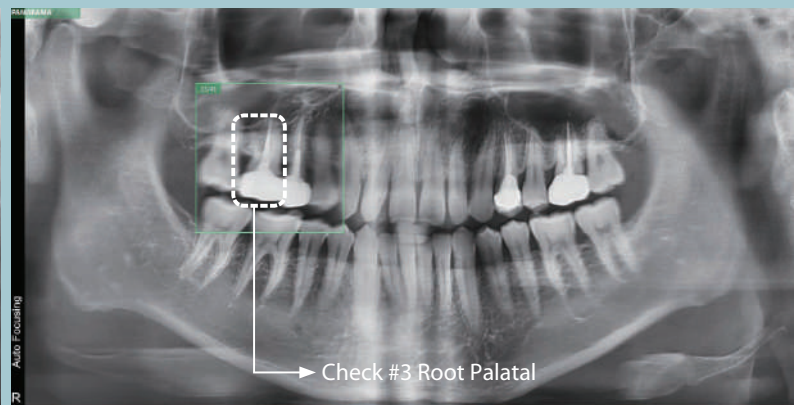
Use the Smart Plus's Next Generation Panoramic Technology to Discover:

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

PRODUCT CONFIGURATION

	CBCT	PANO	CEPH
Smart Plus	•	•	
Smart Plus RC	•	•	•

SPECIFICATIONS (Smart Plus : **PHT-35LHS**)

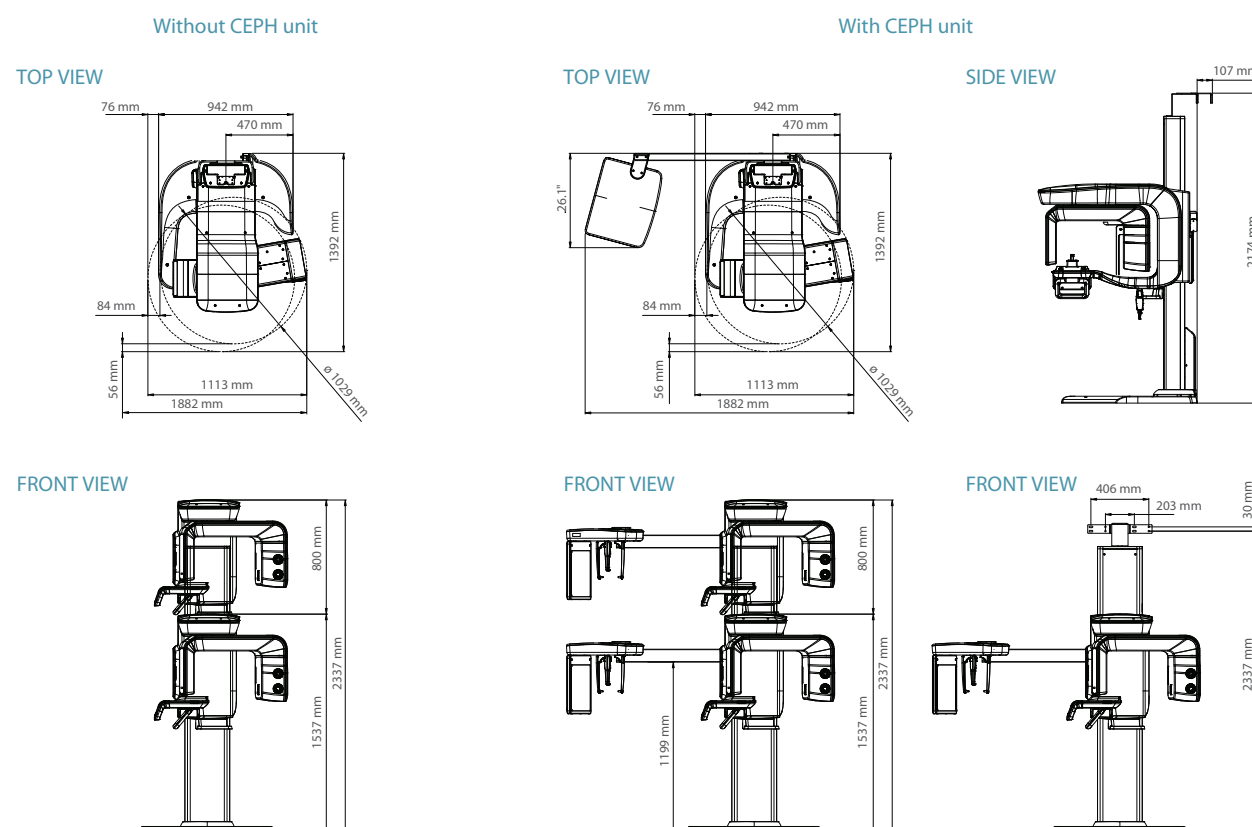| Function		CT (with Auto Pano) + Pano + Ceph + Model Scan
Focal Spot		0.5 mm (IEC 60336)
CT FOV Size		5x5 cm / 10x8.5 cm (Anatomical 12x9 cm) / 10x7 cm
Voxel Size		0.08 mm / 0.12 mm / 0.2 mm / 0.3 mm
Scan Time	CT	18 sec
	Pano	14.1 sec / 7 sec
	Ceph	1.9 sec / 3.9 sec
Gray Scale		14 bit
Tube Voltage		60 ~ 99 kV
Current		4 ~ 16 mA
Weight	With Ceph unit	357.1 lbs

*The specifications are subject to change without prior notice.

DIMENSIONS [Unit: mm]

Without CEPH unit

TOP VIEW

76 mm · 942 mm · 470 mm · 1392 mm · 84 mm · 56 mm · 1113 mm · 1882 mm · ø 1029 mm

FRONT VIEW

800 mm · 2337 mm · 1537 mm

With CEPH unit

TOP VIEW

76 mm · 942 mm · 470 mm · 1392 mm · 26.1" · 84 mm · 56 mm · 1113 mm · 1882 mm · ø 1029 mm

SIDE VIEW

107 mm · 2174 mm

FRONT VIEW

800 mm · 2337 mm · 1537 mm · 1199 mm

FRONT VIEW

406 mm · 203 mm · 30 mm · 2337 mm

*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).

SPEED, QUALITY, PREDICTABILITY
NO COMPROMISE

Smart X

- **SMART FOCUS MODE**
- **COMPRESSED SENSING TECHNOLOGY**
- **HIGHEST RESOLUTION WITH 0.05mm VOXEL SIZE**
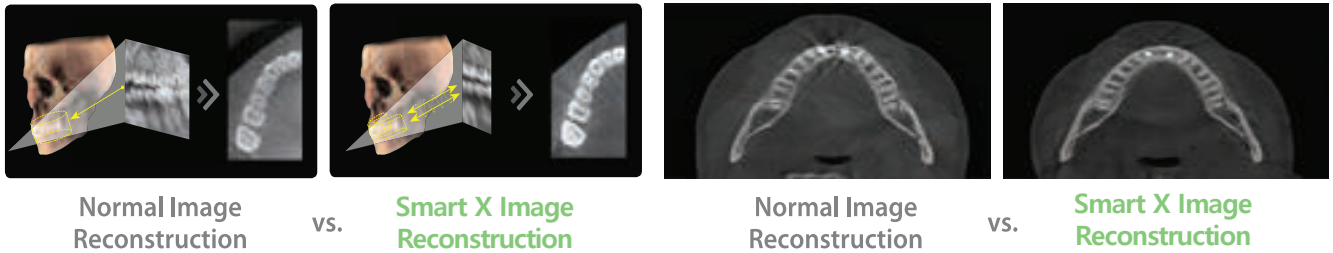- **FASTEST SCAN TIME**

49.5 μm
CMOS
Sensor

SMART FOCUS MODE

Comprehensive planning for complex cases in one go. Smart Focus is a revolutionary technology that captures 5 high-resolution images in just one scan. Whether new patients or complex cases, multiple images obtained from a single scan allow comprehensive treatment planning.

COMPRESSED SENSING TECHNOLOGY

Vatech dramatically improves its image quality with much less artefact and noise via its Compressed Sensing Technology (CST), iterating its reconstruction process 10 times more than the normal amount to depict the object's true representation.

Normal Image Reconstruction vs. Smart X Image Reconstruction

Normal Image Reconstruction vs. Smart X Image Reconstruction

ENDO MODE WITH HIGH RESOLUTION

With its 4cm x 4cm volume mode and 50 micron voxel size, the endo mode will optimise 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
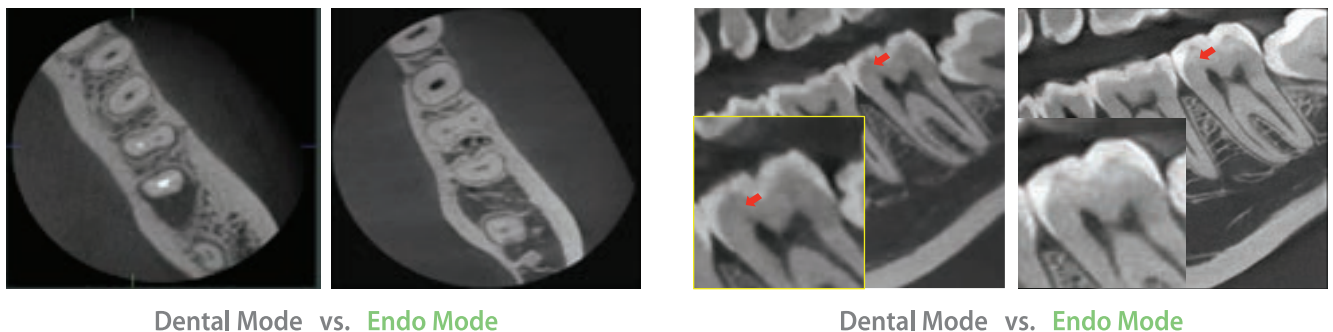
MULTI FOV SELECTION

The Smart X offers a range of selectable fields of view. The Multi FOV option allows users to select the optimum FOV mode while minimising exposure to areas that are not in the region of interest. The selection includes the following FOV sizes for diagnostic needs: 12x14, 12x8.5, 8x8, 8x5, and 4x4. These options cover the full arch region, sinus and left/right TMJ, and suits most oral surgery cases and multiple implant surgeries.

GREEN SCAN TIME

Due to its scan time, the Smart X minimises motion artefact 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.

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

Function		CT + Pano + Ceph + Model Scan
Focal Spot Size		0.5 mm (IEC 60336)
CT FOV Size		Endo(4x4), 8x5, 8x8, 12x8.5, Smart Focus, Double Scan(12x14)
Voxel Size	4x4	0.05 mm
	8x5 / 8x8	0.12 mm / 0.2 mm
	2x8.5 /Double Scan/Smart Focus	0.2 mm / 0.3 mm /0.07mm
Scan Time	Pano	4.0 sec / 14.1 sec
	Ceph	1.9 sec / 4.9 sec
	CBCT	10.0 sec (8x5- 8x8)▎ 15.5 sec (12x8.5, Smart Focus, Double Scan)▎ 13.0 sec (Endo)
Gray Scale		14 Bit
Tube Voltage / Current		60 - 99 kVp / 4 - 16 mA
Weight	Without CEPH unit	359.13 lbs-without Base
		480.38 lbs-with Base
	With CEPH unit	414.25 lbs-without Base
		535.50 lbs-with Base
Dimensions	With CEPH unit	75.02″(L) x 57.39″(W) x 91 24′(H) - withoutBase
		75.02″(L) x 57.39″(W) x 92.34″(H) - withBase
	Without CEPH unit	42.72′(L) x 57.39″(W) x 91.24″(H) - withoutBase
		42.72″(L) x 57.39″(W) x 92.34″(H) - withBase

*The specifications are subject to change without prior notice.

DIMENSIONS [Unit: Inch]

WITH CEPH

TOP VIEW

FRONT VIEW

WITHOUT CEPH
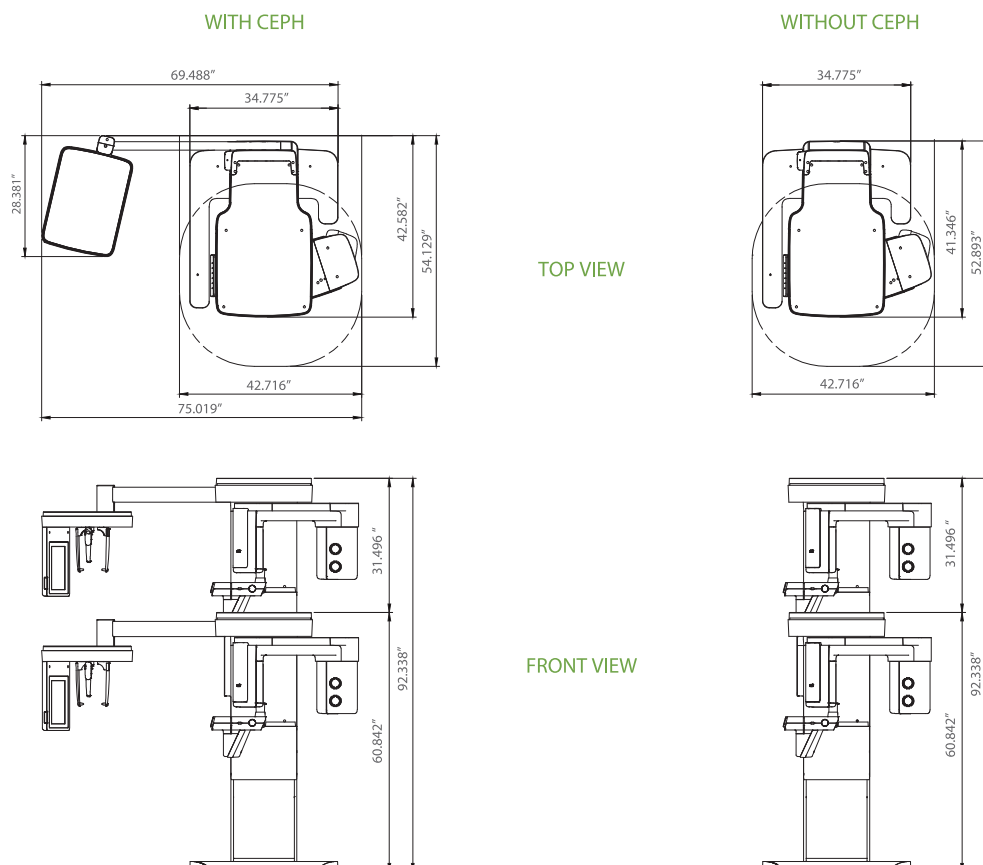
***An additional 3 inches (76.2 mm) of space is required behind the unit** for wall mount bracket installation (mandatory unless there is a base mount installation).*

vatech

www.vatech.uk.com

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, 8x8, 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 8x5/8x8	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.
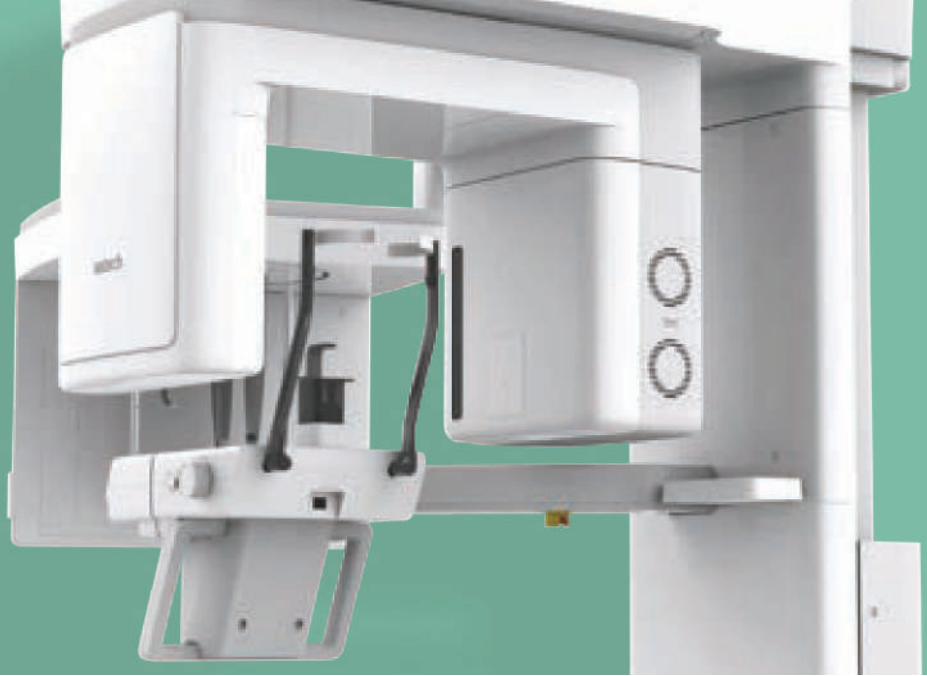

1.9 sec   Ceph
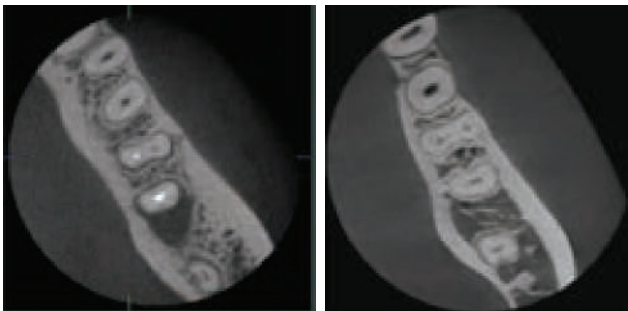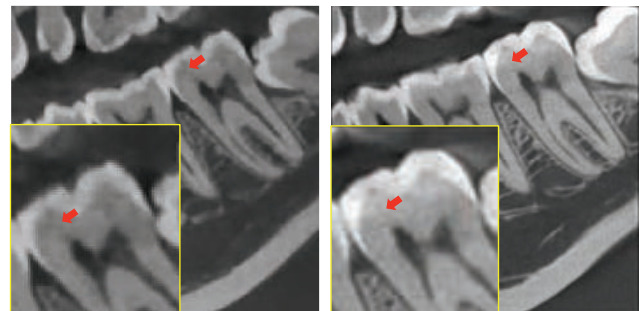
2.9 sec   CBCT

3.9 sec   Pano

ENDO MODE WITH HIGH RESOLUTION

With its 4cm x 4cm volume mode and 50 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.
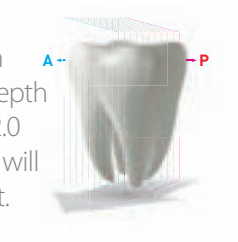
DENTAL MODE VS. ENDO MODE
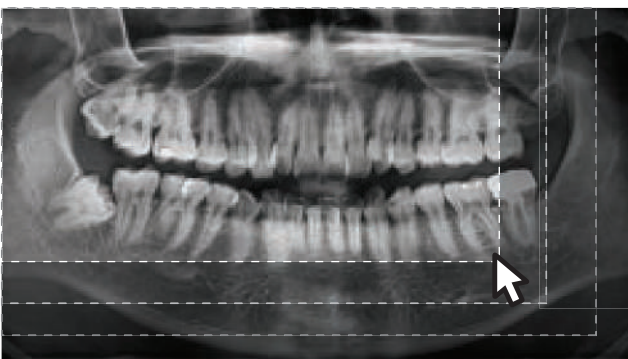

DENTAL MODE VS. ENDO MODE

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. The specially designed Jig offers stable protection from partial model to full model.


*3D scanning for Plaster Cast with FOV 8x8 (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	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
	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) - with Base

*The specifications are subject to change without prior notice.

DIMENSIONS [Unit: mm]

WITH CEPH

TOP VIEW

FRONT VIEW

WITHOUT CEPH
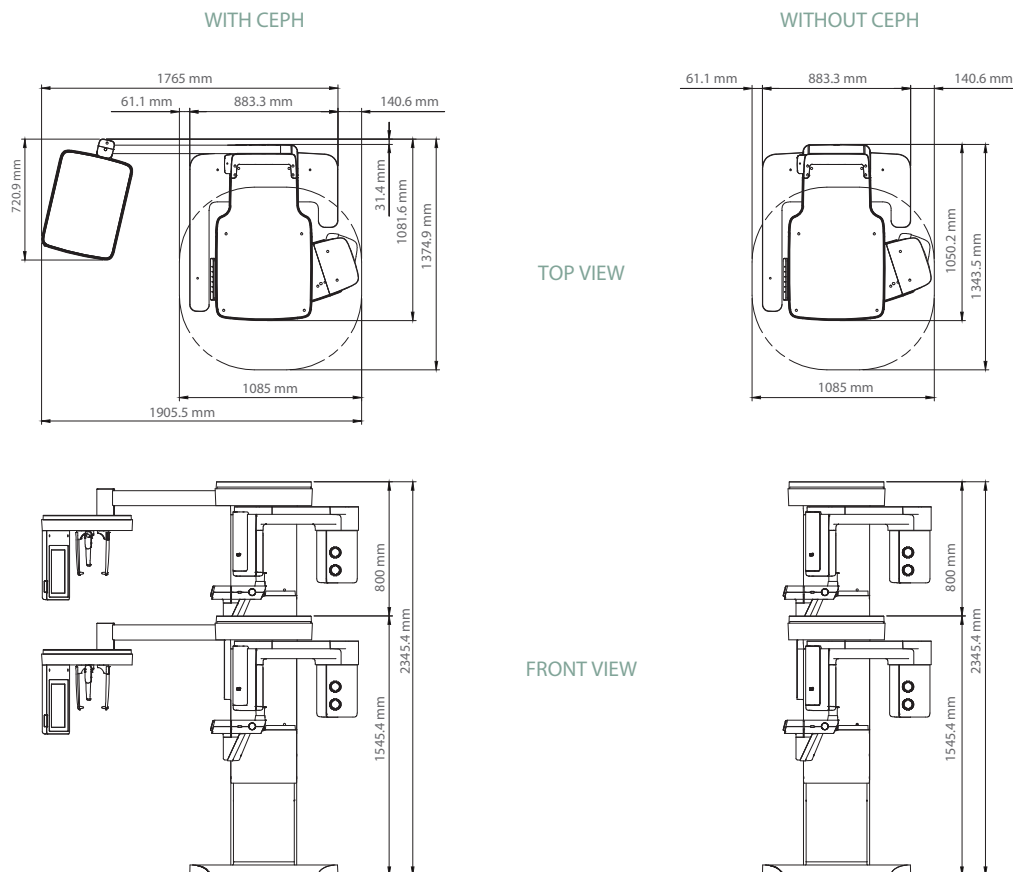
__An additional 3 inches (76.2 mm) of space is required behind the unit__ for wall mount bracket installation (mandatory unless there is a base mount installation).

MAXIMIZE YOUR POTENTIAL TOWARDS SUCCESS

Green X 18™

- **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 18 is an advanced 4-in-1 digital x-ray imaging system that incorporates Pano, Ceph (optional), CBCT, and Model Scan. By combining image processing and Vatech's extensive experience in the dental imaging field, the Green X 18 provides high-quality images with lower radiation. This will improve your diagnostic accuracy and lead to increased treatment planning and patient satisfaction.

MULTI FOV SELECTION

Green X 18 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: 18x15, 16x11, 8x8, 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 8x5/8x8	FOV 16x11	FOV 18x15
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 18 minimizes motion artifact and enables faster workflow. It produces superb diagnostic images, which will be a source of pride for any dental practice.
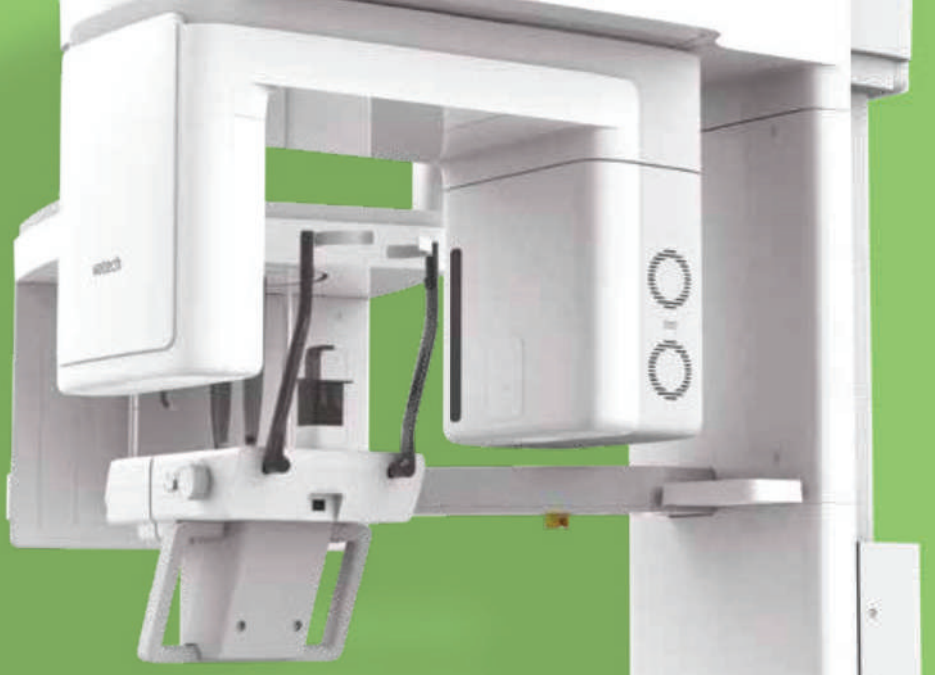Focusing on the highest quality of patient care, Vatech strives to improve the health and safety of your patients.
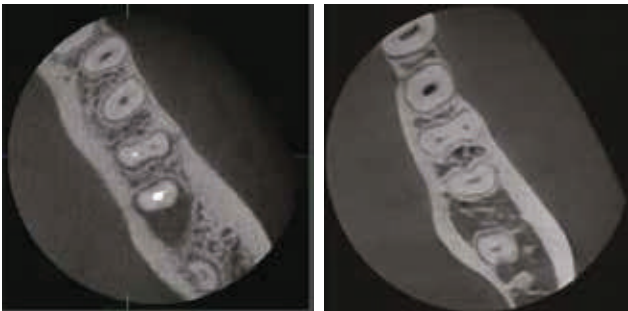

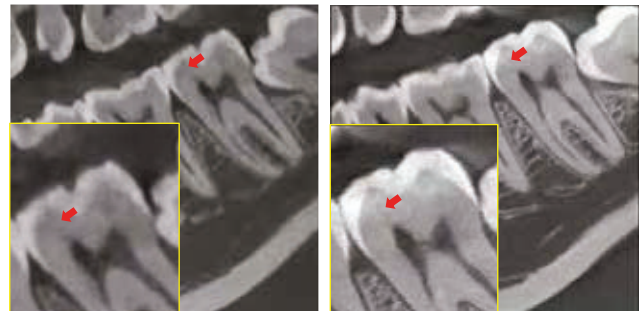**1.9** sec — Ceph **2.9** sec — CBCT **3.9** sec — Pano

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.
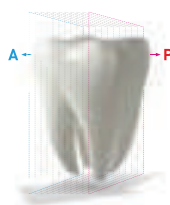
DENTAL MODE   VS.   ENDO MODE

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

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

*3D scanning for Plaster Cast with FOV 8x8 (cm)

## SPECIFICATIONS [Green X 18 : **PHT-75CHS**]

Function		CT + Pano + Ceph + Model Scan
Focal Spot Size		0.5 mm (IEC 60336)
CT FOV Size		4x4, 5x5, 8x5, 8x8, 16x11, 18x15 cm
Voxel Size	4x4	0.05 mm
	5x5	0.08 mm / 0.12 mm
	8x5 / 8x8	0.12 mm / 0.2 mm
	16x11 / 18x15	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	165.9 kg (365.74 lbs - without Base)
		220.9 kg (487.00 lbs - with Base)
	With CEPH unit	190.9 kg (420.86 lbs - without Base)
		245.9 kg (542.11 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) - with 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: Inch / mm]

WITH CEPH

WITHOUT CEPH

TOP VIEW

FRONT VIEW
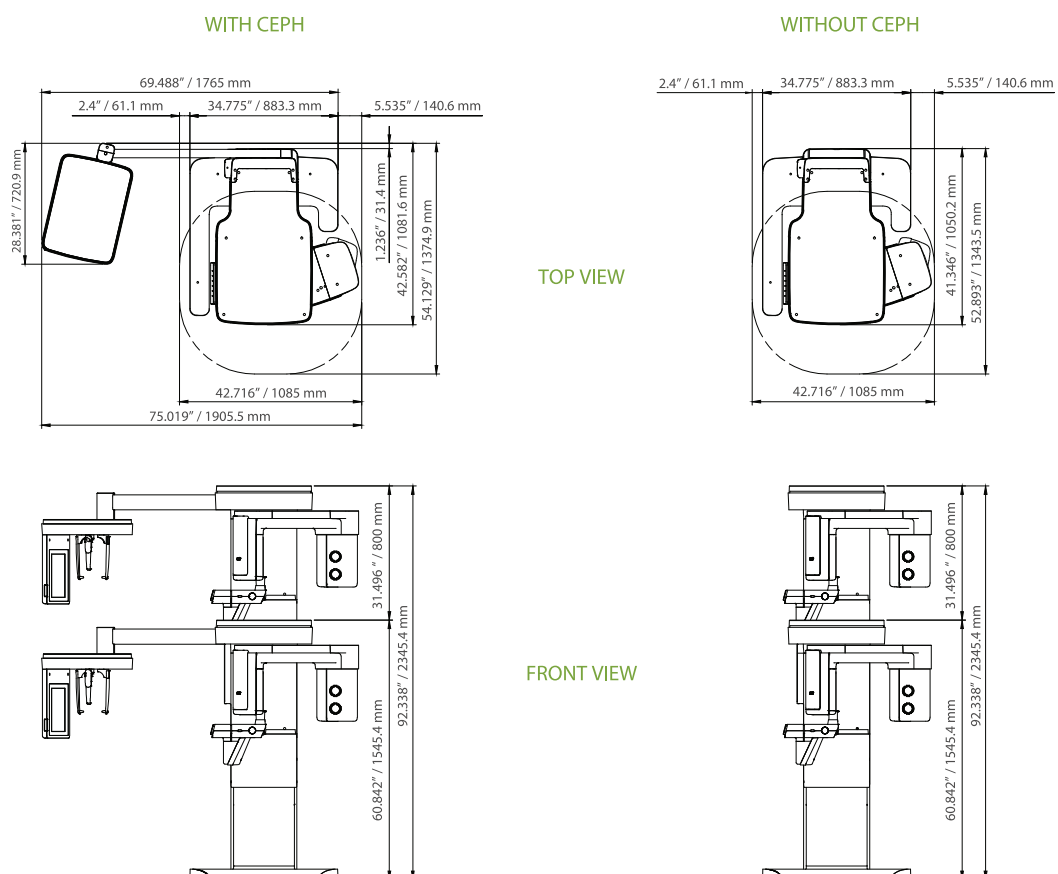
THE NEXT GREEN INNOVATION

Green 16/18™

- **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**
- **INSIGHT PAN**

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

The Green 16/18 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 image 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

The Green 16/18 offers a range of selectable fields of view. The Multi FOV enables the user to select the optimal FOV mode and minimizes exposure to areas not in the region of interest. Select the proper FOV size among 18x10, 16x9, 13x10, 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 / 13x10	16x9 / 18x10
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

The Green 16/18 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.

1.9 sec	4.9 sec	7.0 sec
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, the Green 16/18 provides clinically diagnosable x-ray scans at a low x-ray dosage. With low dose radiography, achieving clinically diagnosable image quality is the new golden-standard.
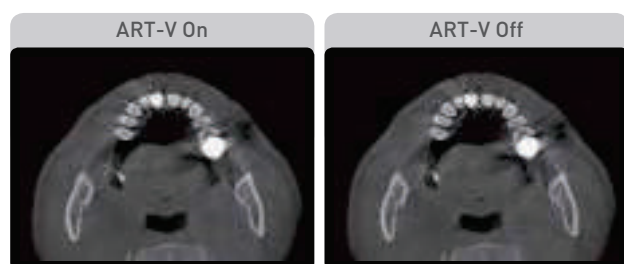
Effective Dose Data

Others

Green 16/18™

up to **70%**
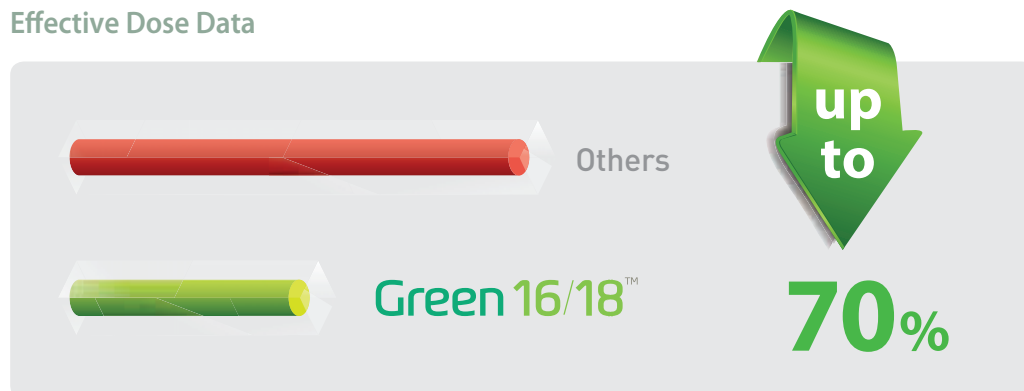
THE ART-V

Metal artifact hinders visualization and naturally reduces diagnostic confidence.
Clear images cause less stress and provide more confidence which lead to accurate diagnosis for implant planning.

ART-V On

ART-V Off

*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
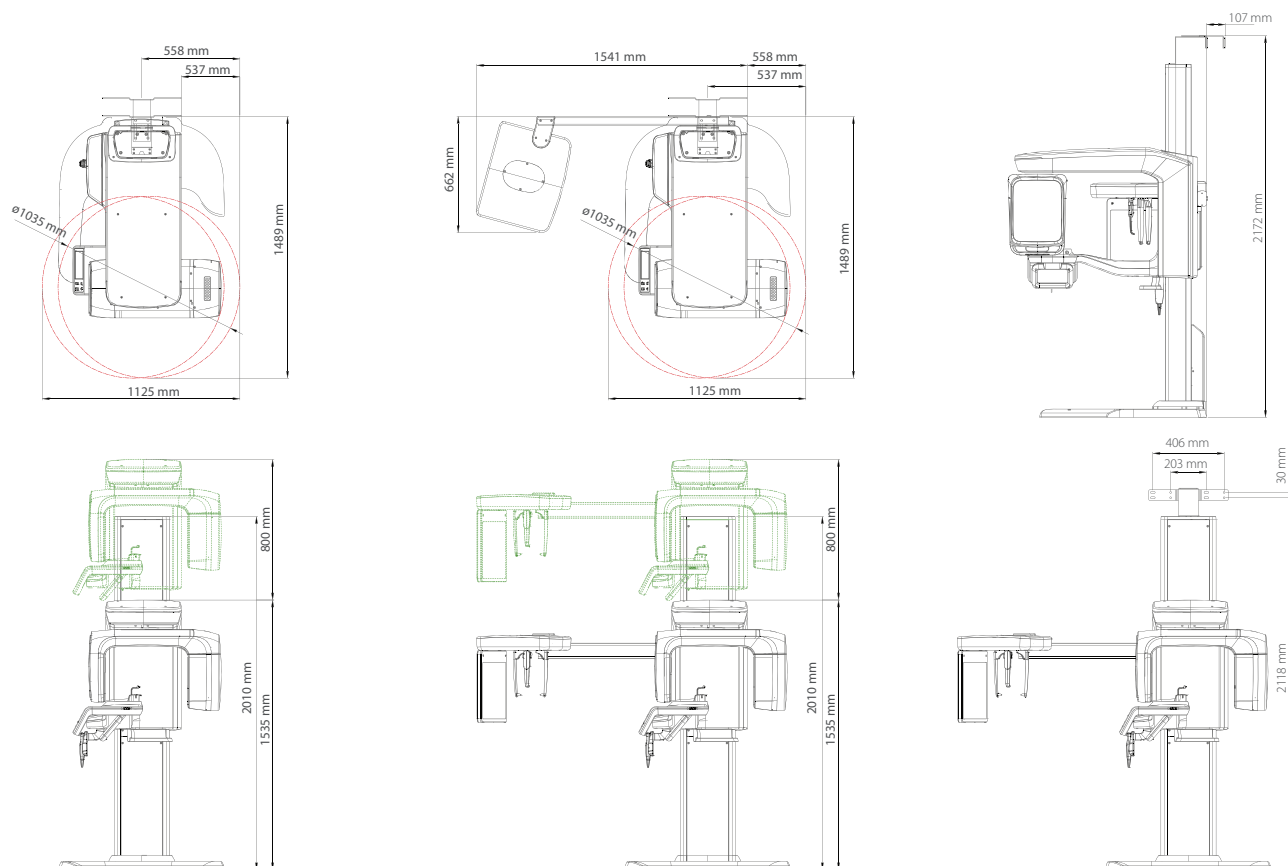• Stable protection from partial model to full model

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

SPECIFICATIONS [Green 16/18 : **PHT-65LHS**]

Function		CT + Pano + Ceph + Model Scan
Focal Spot Size		0.5 mm (IEC60336)
CT FOV Size		16x9 cm : Multi [5x5 / 8x9 / 12x9 / 16x9 / 16x15(Stitching) cm] 18x10 cm : Multi [5x5 / 8x9 / 13x10 / 18x10 / 18x10(Stitching) cm]
Voxel Size	5x5	0.08 mm / 0.12 mm
	8x9	0.12 mm / 0.2 mm
	12x9	0.2 mm / 0.3 mm
	13x10	0.2 mm / 0.3 mm
	16x9	0.2 mm / 0.3 mm
	18x10	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 - 18x10) / 4.9 sec (5x5 - 8x9)
Gray Scale		14 Bit
Tube Voltage / Current		60 - 99 kVp / 4 - 16 mA
Weight	Without CEPH unit	134 kg - without the Base
		187 kg - with the Base
	With CEPH unit	159 kg - without the Base
		212 kg - with the Base
Dimensions	Without CEPH unit	1125 mm (L) x 1489 mm (W) x 2335 mm (H)
	With CEPH unit	1874 mm (L) x 1489 mm (W) x 2335 mm (H)

*The specifications are subject to change without prior notice.

DIMENSIONS [Unit: mm]

***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).