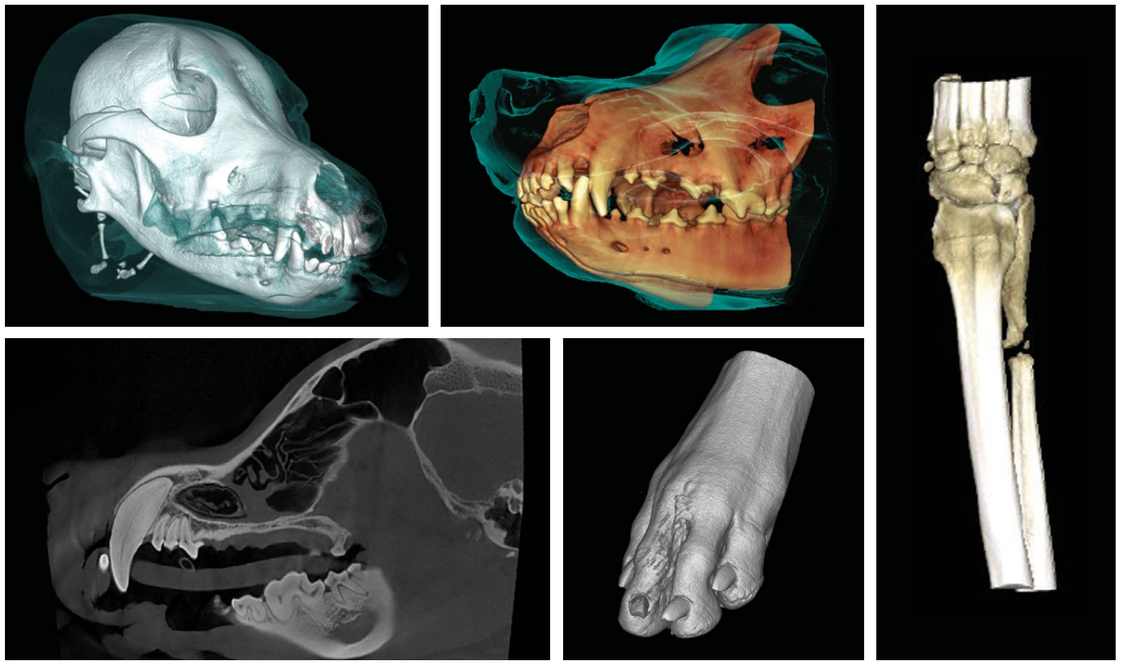
Planmed Verity® VET

Veterinary CBCT Scanner

ENGLISH

Planmed

Versatile veterinary CBCT scanner



Planmed Verity® VET – premium CBCT scanner for veterinary 3D imaging

Cone-beam computed tomography (CBCT) provides 3D imaging with detailed information for veterinary treatment planning.

Planmed Verity® VET CBCT scanner is designed for the imaging of small and mid-sized companion animals with ultimate precision.

Enhanced diagnostics with low dose 3D imaging

Delayed diagnosis of bony or dental defects in companion animals can lead to severe consequences.

Planmed Verity VET provides high-resolution, low dose 3D imaging for improved diagnostics.

CBCT imaging emits low scattered radiation which is important in protecting the veterinary treatment staff and the environment from radiation.

Why CBCT for veterinary radiography?

- 3D imaging is anatomically accurate for assessment and treatment planning.
- The fast scan reduces time under anesthesia as the image is captured in less than a minute – and in some cases, anesthesia may not even be required.
- 3D images can be used when visualizing the conditions and treatment options with the animal owner.
- CBCT is perfect for use on animals of different shapes and sizes – particularly suitable for imaging brachycephalic animals.

Expanding diagnostic horizons

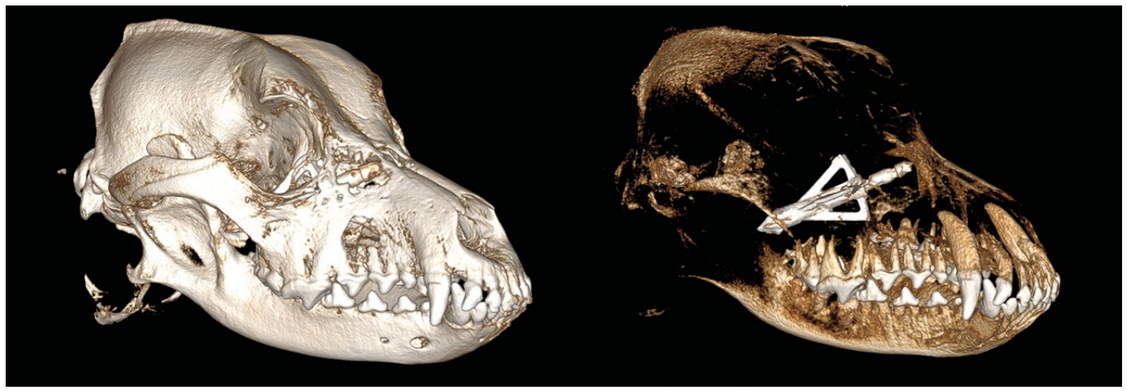
CBCT is ideal for many orthopedic and dental assessments, with research confirming its value. For example, a study performed at the University of Copenhagen, comparing three diagnostic methods for detecting tooth resorption (TR) in cats, found that CBCT provides both high sensitivity and specificity for detecting TR lesions and significantly outperforms traditional dental radiography in this respect.*

In addition, CBCT can be useful for a wide range of specific indications, including:

- nasal cavity disorders
- ear conditions
- foreign body detection
- dermatology-related issues
- retrobulbar and salivary gland studies
- oral surgery, such as tumor assessment and surgical planning.

*Eriksson, J., Denwood, M., Nielsen, S. S., McEvoy, F., Allberg, C., Thuesen, I. S., and Kortegaard, H. 2024. Accuracy of three diagnostic tests to detect tooth resorption in unowned unsocialised cats in Denmark. Journal of Small Animal Practice (2024); 1–7.

Advanced imaging



Quick reconstruction of 3D images

Iterative 3D reconstruction takes place in real time. During the reconstruction process, the patented image processing algorithms refine the image for an optimal presentation of clinically relevant data.

DICOM images are automatically archived to PACS after the scan and are available for review on all workstations in the network.

Stitching

It is also possible to extend the scanned volume, if needed. This option, called the stitching algorithm, combines two adjacent images into a single volume and is useful in viewing anatomies that require an extended imaging volume.

Artifact removal

The advanced artifact removal algorithms ensure high-quality images, even for very complex cases. With optimal processing, the details of the bone structure up to the bone/metal interface are easily discernible. This is invaluable for post-operative imaging and joint surface evaluation.

Accurate diagnosis with 3D imaging

High-quality images

Planmed Verity® VET provides highly accurate submillimeter-resolution 3D images of the patient's anatomy. The CBCT scanner is designed to find even the smallest pathologies and fractures in the animal's bony structures.

With the Planmed Verity VET CBCT scanner, the patient's teeth, skull and extremities are captured accurately in 3D for diagnosis and treatment planning.

Optimal diagnosis and treatment plan

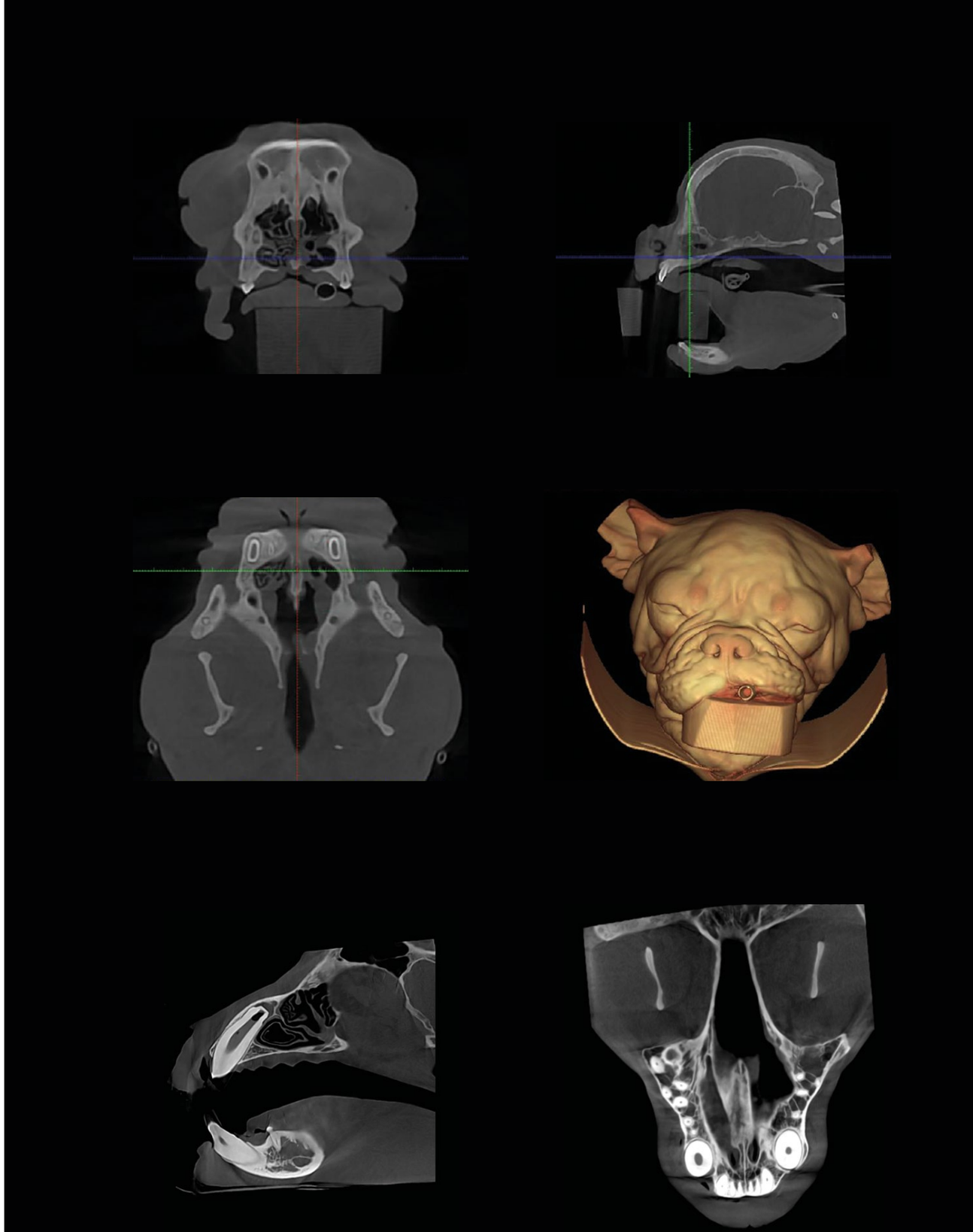
Thanks to the advanced imaging technology with the dedicated patient positioning and automated correction algorithms, technicians can avoid unnecessary retakes and excess dose. Radiologists can rely on the quality of the volumetric image dataset and focus on the diagnostic work.

Intelligent image processing

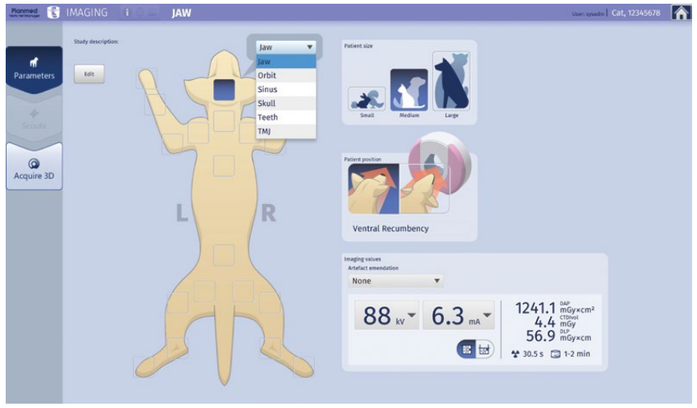
The intelligent removal algorithm for metal artifacts (MAR) ensures the maximum visibility of implants, fixators, or metal prostheses, and the bone surrounding them.

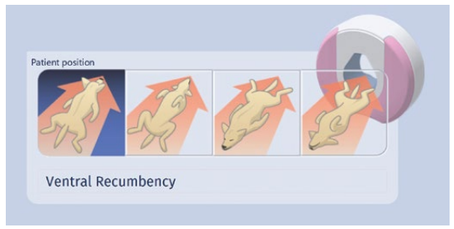
Movement artifact correction

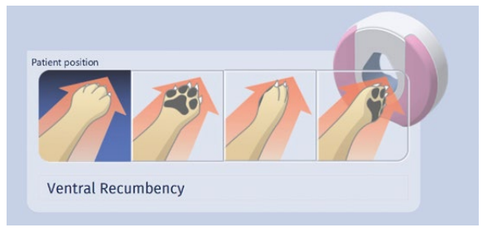
Planmed Verity VET with **Planmeca CALM™** can correct any patient movement. This revolutionary algorithm eliminates motion artifacts from CBCT images, making it an invaluable tool for veterinary imaging.

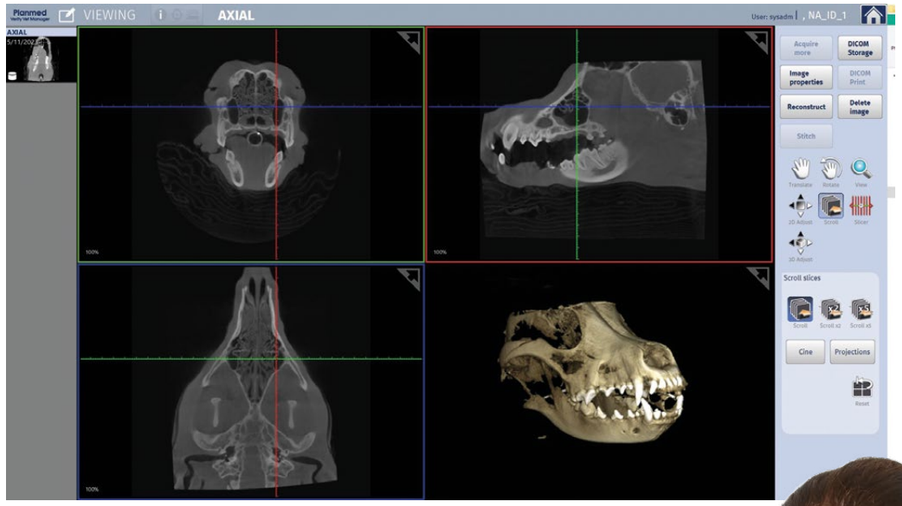


Easy positioning









Optimal patient positioning

The **Planmed Verity® VET** scanner is equipped with a motorized gantry and positioning trays for perfect patient positioning.

The multi-functional patient table with lockable casters enables flexible imaging of different anatomical targets. Its adjustable design easily adapts to varying requirements, making it ideal for rooms with changing workflows.

With the highly accurate adjustment capabilities and anatomically designed accessories, the target is always within the imaging volume, and the patient is positioned correctly for each type of diagnostic exam.

Intuitive control interface

Planmed Verity VET is equipped with a one-hand control system for both gantry and tray movement. The user can comfortably operate the device in a precise and simple way while positioning the patient.

Optimal visibility of the anatomical region to be examined

The extended **TearDrop™** opening of Planmed Verity VET offers excellent visibility and access to the patient from both sides of the gantry. The imaging volume is indicated with automatically activating red and green lasers.

The open bore design of Planmed Verity VET provides unobstructed space for equipment like intubation tubes and simplifies positioning.

Workflow optimization with the touch screen

The user-friendly GUI, optimized for the latest generation touch screen, guides the user through the procedure. The imaging pre-sets and user-configurable workflow ensure smooth and simple operation.

There are multiple tools and software features that can be easily selected from the touch screen for image processing, section thickness definition, surface rendering, and much more. The Planmed Verity VET touch screen is adjustable both in height and tilt to optimize ergonomics and workflow.

Compact and portable system

Easy set-up

Planmed Verity® VET can be placed in virtually any room with minimum requirement for shielding, even alongside other existing equipment. Its lightweight design makes it effortless to move between rooms, and its compact footprint ensures a perfect fit also in the smallest spaces.

The standalone unit requires only standard mains power and an Ethernet connection to start capturing astounding high-resolution 3D images with a low dose.

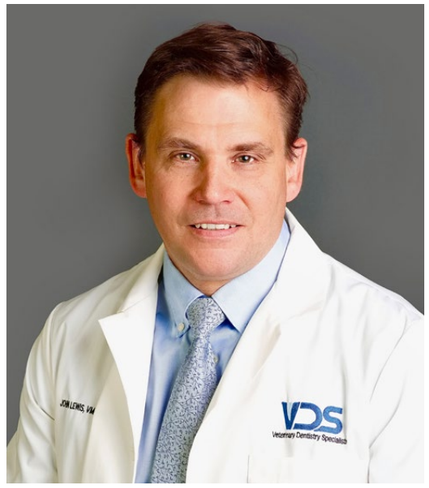
Connectivity

The **Planmed Verity® Manager** software is equipped with integrated image transfer protocols and a patient list used for collaborating with animal hospital information systems and image archives. Planmed Verity Manager is fully compatible with the DICOM protocol.

Supported DICOM service classes

- Modality Worklist
- Storage
- Query/Retrieve
- Print
- Radiation dose structure report (RDSR)
- Modality performed procedure step (MPPS)

Customer success stories



*"We are entering our eighth year with **Planmed Verity® VET**. It has opened new doors of diagnostic and therapeutic capabilities, allowing for intricate surgical planning necessary to accomplish new techniques such as 3D printing for mandibular reconstruction. The team at Planmed has been very responsive whenever we have a question or concern about the Verity, which is an important consideration when deciding on a CBCT system."*

– **Dr. John Lewis**
VMD, DAVDC, Fellow, AVDC OMFS
Veterinary Dentistry Specialists

*"Our **Planmed Verity® VET** has given us a new diagnostic tool and a deeper understanding and knowledge of the anatomy of the feline and canine skull. We feel more secure with some of our dental patients since we can see exactly what is going on and it is also helpful for good planning of the work.*

It is excellent for rabbit teeth, inner ears and distal extremities for dogs and cats and helps us come further in challenging cases like chronic rhinitis and diseases of the TMJ.

Planmed Verity VET is quick and easy to manage and an enjoyable challenge to learn and explore."

– **Dr. Lena Svendenius and Dr. Jon Samuelsson**
Falkoping Small Animal Clinic, Sweden

*"We had a **Planmed Verity® VET** CBCT installed in our practice about 3 years ago. This immediately took our diagnostics to a new level; although the images significantly improve periodontal and periapical evaluation, the greatest benefit we have found is in visualization of oral and peri-oral tumors. We have been able to clearly demonstrate the extent of lesions, aiding in prognostication and surgical margin determination. The inclusion of contrast studies has improved visualization of soft tissues. We have used our CBCT to examine joints, tympanic bullae and associated structures and have been able to demonstrate systemic lymphadenopathy on a full-body scan of a Guinea pig. Our CBCT is our diagnostic imaging go-to for rabbit and brachycephalic dentistry and oral surgery cases."*

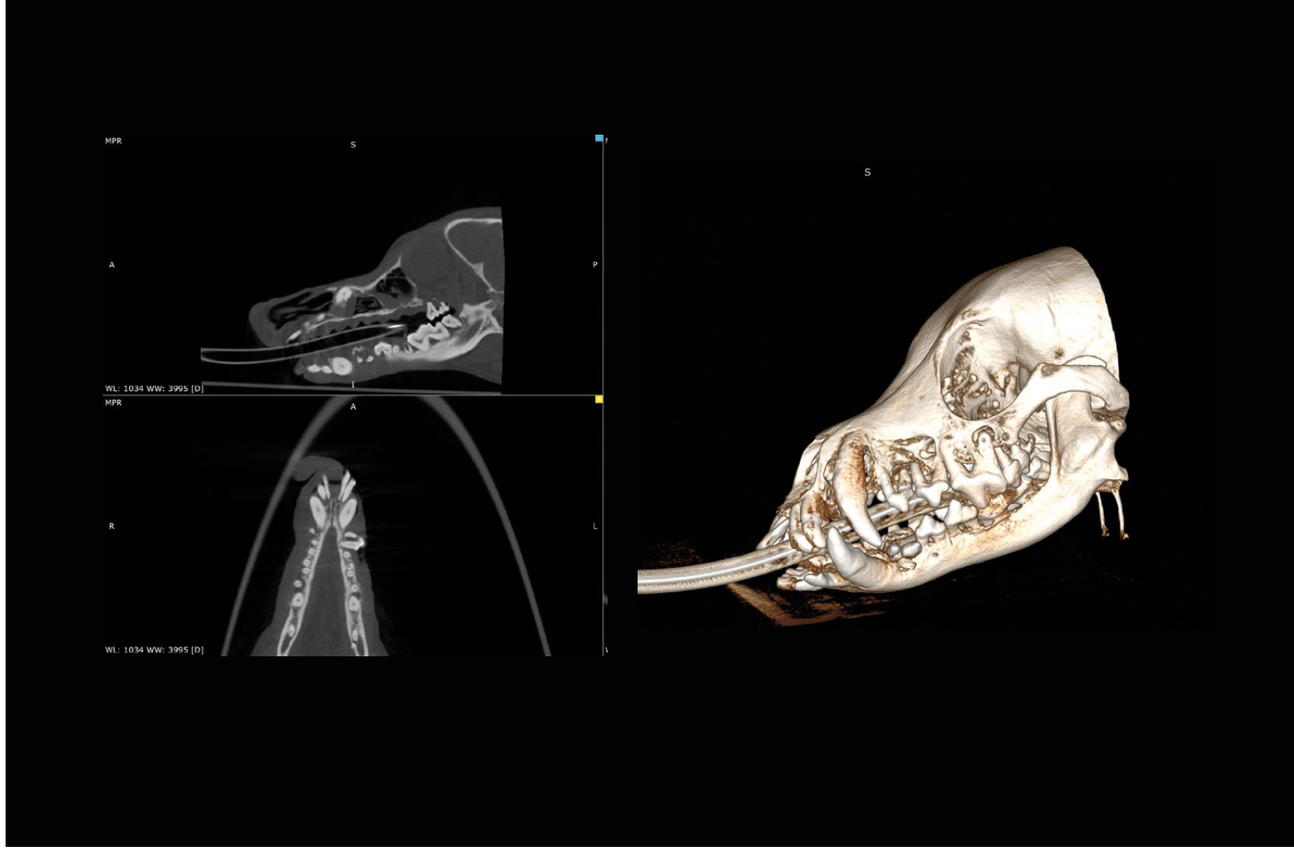
– **Dr. Cedric Tutt**
BVSc, MMedVet(Med), Diplomate EVDC, MRCVS
Veterinary Specialist: Dentistry and Oral Surgery
RCVS Recognised Specialist in Veterinary Dentistry
EBVS® European Veterinary Specialist in Dentistry
Cape Animal Dentistry Service

"3D imaging revolutionizes veterinary medicine by providing unmatched precision and clarity. It reveals the complex structures of an animal's anatomy, such as the airways, teeth, skull, and extremities, capturing even the tiniest details that might otherwise go unnoticed. After a thorough clinical examination, 3D imaging allows us to offer our clients a comprehensive visual report of their pet's condition. This is the true advantage of 3D imaging technology."

– **Dr. Sigbjørn Hesthammer Storli**
DVM, Diplomate EVDC, EBVS® Veterinary Specialist in Dentistry
Dyretannklinikken veterinary clinic, Sem, Norway

"We constantly find new applications for cone-beam computed tomography in veterinary medicine. For example, the orthopedists at our clinic use CBCT for elbow joint diagnostics and for imaging the toe joints of paws. CBCT is also more cost-efficient than taking conventional CT images, which is why some other clinics refer their patients to our clinic for CBCT imaging,"

– **Dr. Chita Wahlroos**
Licentiate of Veterinary Medicine
Eläinklinikka Avec veterinary clinic, Porvoo, Finland



"As Hong Kong's first veterinary clinic dedicated exclusively to veterinary dentistry and oral surgery in Hong Kong, our caseload is complex. We see a high volume of referrals, particularly brachycephalic breeds like French Bulldogs, Pugs, and Persian cats. For years, intraoral radiography was our primary tool, but it had limitations – superimposition often obscured the true extent of pathology, especially in the crowded anatomies of flat-faced breeds.

*Integrating the **Planmed Verity® VET** CBCT into our practice has been a paradigm shift. It is no longer just an "add-on" for rare cases; it has become an essential standard of care for our complex oral surgeries.*

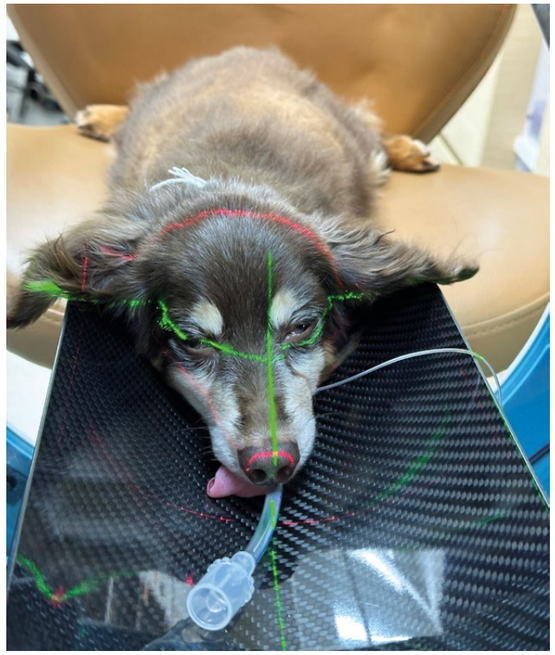
The jump from 2D to 3D is stark. We recently treated a French Bulldog referred for a single fractured canine. While the digital X-ray showed the primary fracture, the Planmed Verity CBCT scan revealed periapical lesions on three other teeth that were completely invisible on the 2D radiograph. Without the CBCT, we would have treated the obvious fracture and sent the patient home with significant, hidden pathology. The sub-millimeter resolution allows us to see root fractures, resorptive lesions, and cysts with absolute clarity.

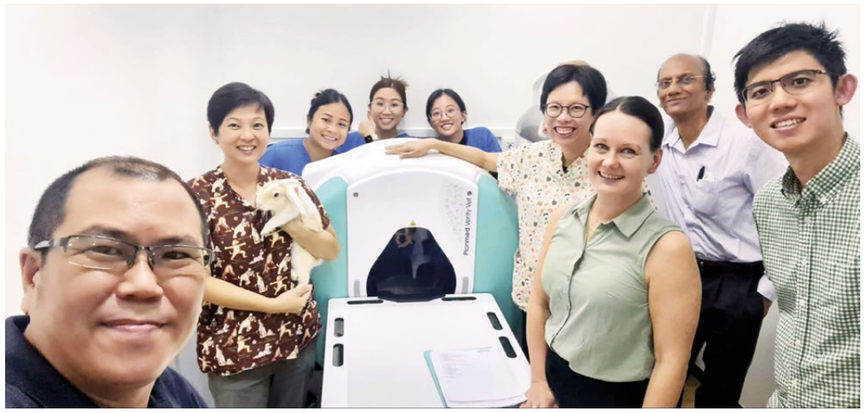
In veterinary dentistry, time under anesthesia is a critical safety factor. Planmed Verity is remarkably fast. We can capture a full volume scan in under a minute. The open-gantry design and adjustable positioning mean we can often scan sedated patients without full general anesthesia for the initial assessment – a massive safety benefit for our geriatric and high-risk patients.

"Seeing is believing" for pet owners. Explaining a complex maxillofacial surgery or a root canal treatment can be abstract for a client. With the 3D rendering software, I can show the owner their pet's skull, rotate the image, and point exactly to the bone loss or fracture line. It builds immediate trust and understanding, making case acceptance significantly higher.

Planmed Verity VET is compact, intuitive to learn, and produces image quality that rivals large medical CTs. For any veterinary clinic serious about dentistry and oral surgery, this technology is not just an investment in equipment – it is an investment in diagnostic truth."

– Dr. Jonathan Tam
BVSc, MANZCVS (Small Animal Dentistry and Oral Surgery)
Apex Veterinary Dentistry and Oral Surgery, Hong Kong

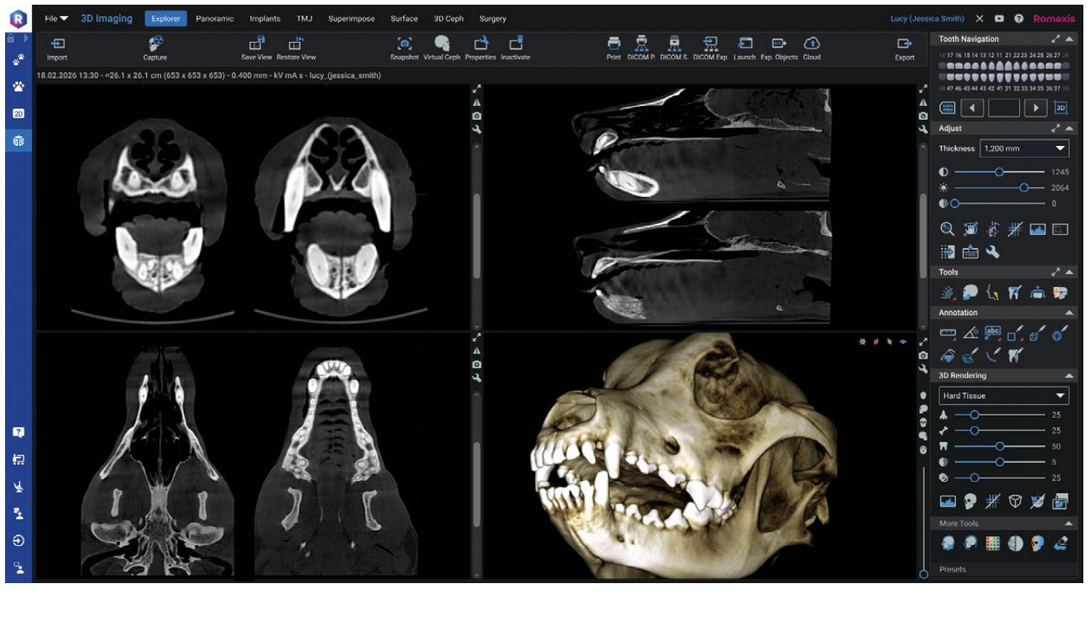




*"The planning and setup of the **Planmed Verity® VET** CBCT scanner were excellently supported by the Planmed teams in Finland and Singapore. The accurate and informative scans have enabled us to reduce surgical time and achieve better patient outcomes. With less guesswork and fewer invasive procedures, we have found our work much more enjoyable. We confidently recommend Planmed Verity VET as a valuable addition to clinics of all sizes aiming to enhance their standards of care."*

– Dr. Christine Ng & Dr. Wendy Chee
DVMs, co-founders and directors
Vet Central, Singapore

Planmeca Romexis®



Your advanced imaging software companion for veterinary diagnostics

Planmeca Romexis® is a powerful and intuitive imaging platform designed to support the full range of veterinary diagnostic needs. From routine radiography to advanced 3D imaging, Planmeca Romexis helps veterinarians and board-certified veterinary dentists visualize anatomy with exceptional clarity and confidence.

One platform for all veterinary imaging

Planmeca Romexis provides a comprehensive environment for viewing, analyzing, and managing both 2D and 3D veterinary images. Advanced image enhancement, measurement, and annotation tools allow clinicians to extract maximum diagnostic information from every scan.

With its intuitive interface and flexible compatibility, Planmeca Romexis integrates seamlessly into veterinary workflows and supports a wide range of imaging devices.

Key benefits:

- Unified software for 2D and 3D veterinary imaging
- Compatible with Mac and Windows
- Integrates with third-party devices, including digital cameras, intraoral sensors, and phosphor plate scanners
- Efficient image management and comparison for longitudinal patient monitoring

Superior visualization of dental and maxillofacial anatomy

High-resolution CBCT imaging provides detailed visualization of complex dental and maxillofacial structures. The intuitive 3D viewer allows clinicians to navigate freely through volumetric data and analyze anatomy from any angle.

With flexible slicing and cross-sectional views, Planmeca Romexis enables precise evaluation of structures such as:

- tooth roots and root morphology
- periodontal and periapical structures
- mandibular and maxillary bone anatomy
- temporomandibular joint structures

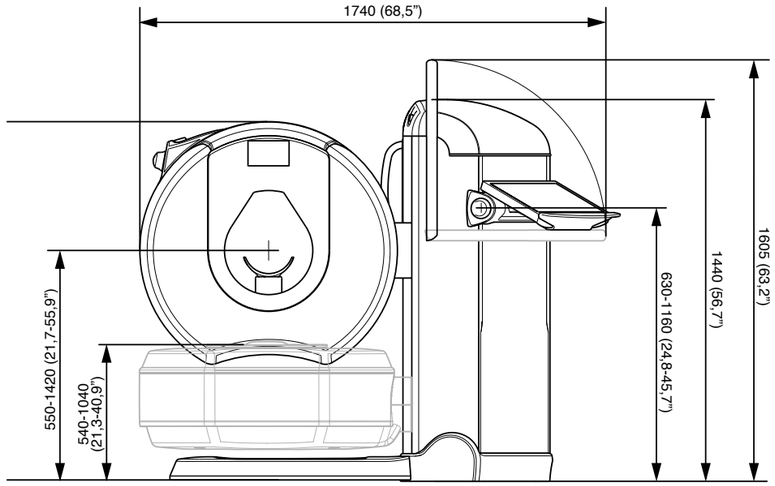
Advanced 3D analysis and treatment planning

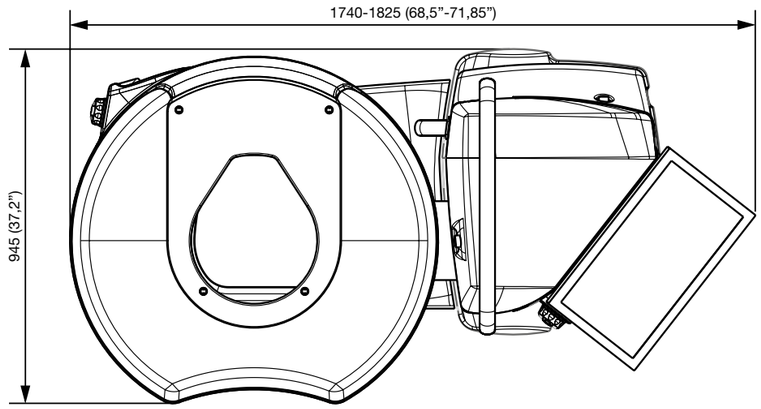
Planmeca Romexis offers a rich set of diagnostic tools that support advanced case evaluation and treatment planning for veterinary dental specialists.

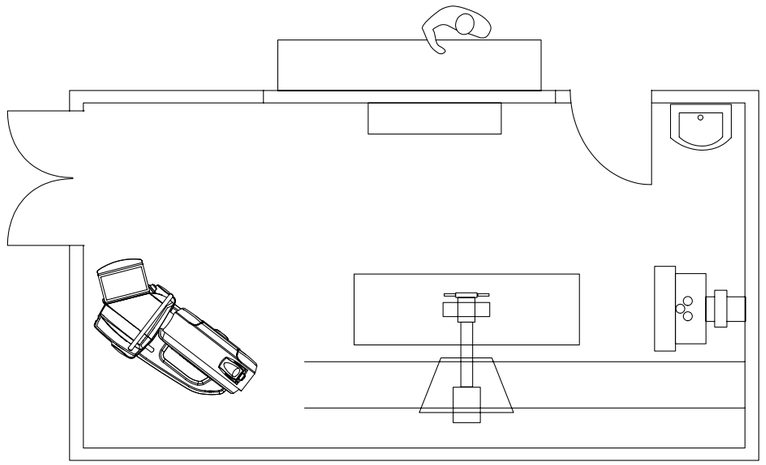
Features include:

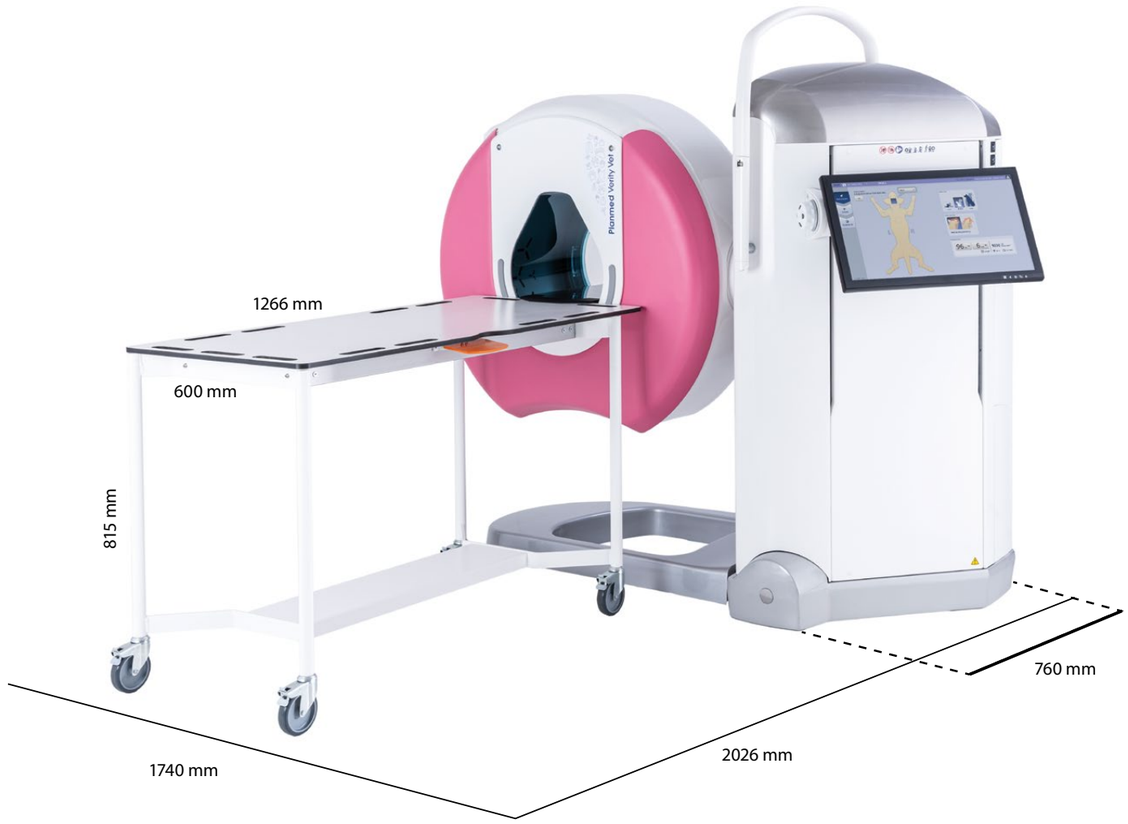
- precise measurements of lengths, angles, and volumes
- tooth segmentation tools for detailed analysis of individual teeth
- comprehensive annotation and documentation tools
- the ability to compare scans over time to monitor disease progression or treatment outcomes
- These capabilities make Planmeca Romexis a powerful tool for complex dental cases, surgical planning, and specialist referrals.

Dimensions


1740 (68,5”)
550-1420 (21,7-55,9”)
540-1040 (21,3-40,9”)
630-1160 (24,8-45,7”)
1440 (56,7”)
1605 (63,2”)


1740-1825 (68,5”-71,85”)
945 (37,2”)




1266 mm
600 mm
815 mm
760 mm
1740 mm
2026 mm

Technical specifications

Anode voltage 80–96 kV
Anode current 1–12 mA
Scan time 18–35 s
Field of view up to 16 x 20 cm (about 7.87 in)
Resolution 0,2 mm (about 0.08 in)
Power input 100–240 V (single phase), 10–16 A (standard outlet)
Weight 350 kg (770 lbs.)

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Planmeca Oy CE 0598 MD Planmeca Romexis

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