



# Veterinary Cone-beam CT

Veterinary Cone Beam Computed Tomography

TC-460



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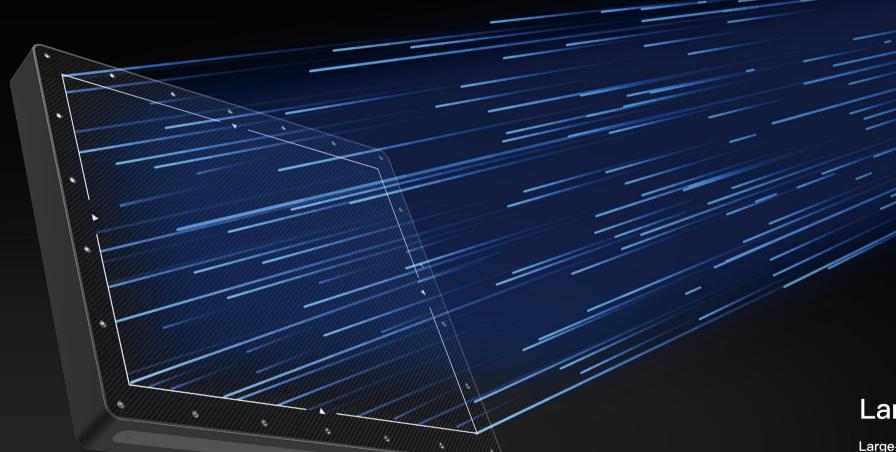
High Definition



Easy Diagnosis



# Exclusive Scanning and Imaging System For High-resolution Images



#### Dynamic Range Pixel Array Detector

Amorphous Silicon Cesium Iodide

- $\cdot$  Active area: 25 cm  $\times$  30 cm, pixel pitch: 120  $\mu$ m
- · Lossless image reconstruction: Large-angle cone beam, true isotropic voxel (identical length, width and height), and zero loss of axial image details
- · A slice thickness of 0.24 mm, high spatial resolution, and rich details

## Large-angle Radiation Beam

Large-angle X-rays allow for imaging an entire organ in a single rotation, promoting greater utilization of X-rays.



High spatial resolution for richer image details

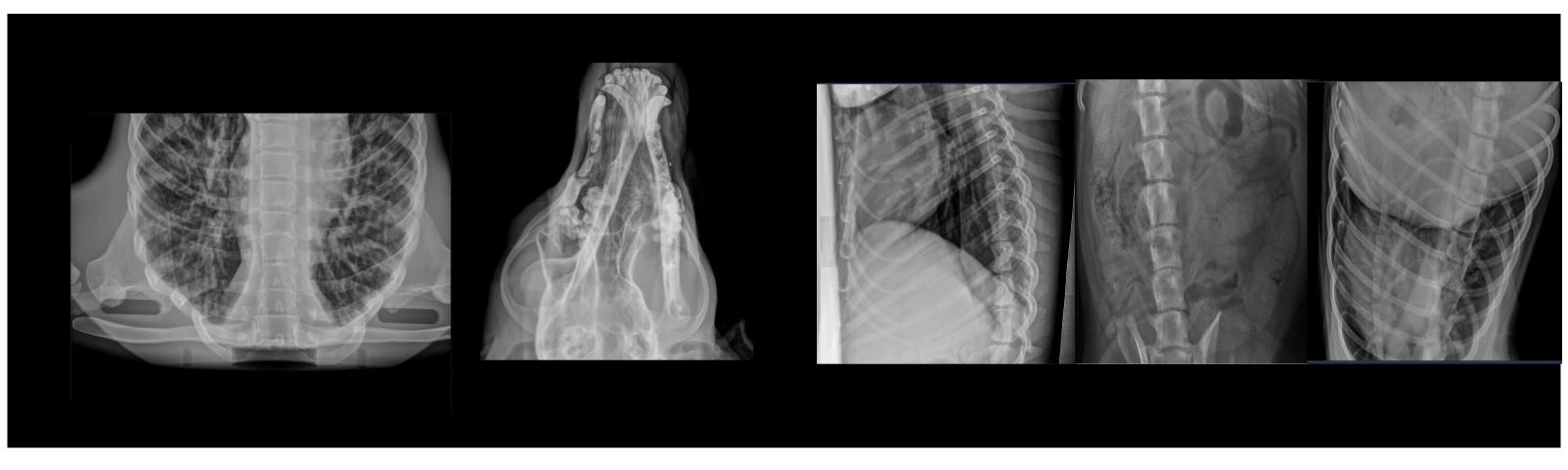


Rapid reconstruction of 3D images



Easy imaging for complex anatomical structures





#### Radiography

SONTU CBCT has the capability to capture two-dimensional images the same as conventional digital radiography, enhancing the benefits of this sought-after equipment.

Clinical Application: Its clinical applications encompass the musculoskeletal, respiratory, and genitourinary systems. However, the effectiveness is limited in the imaging of cardiovascular and central nervous systems, where more advanced imaging tools need to be chosen for diagnosis.



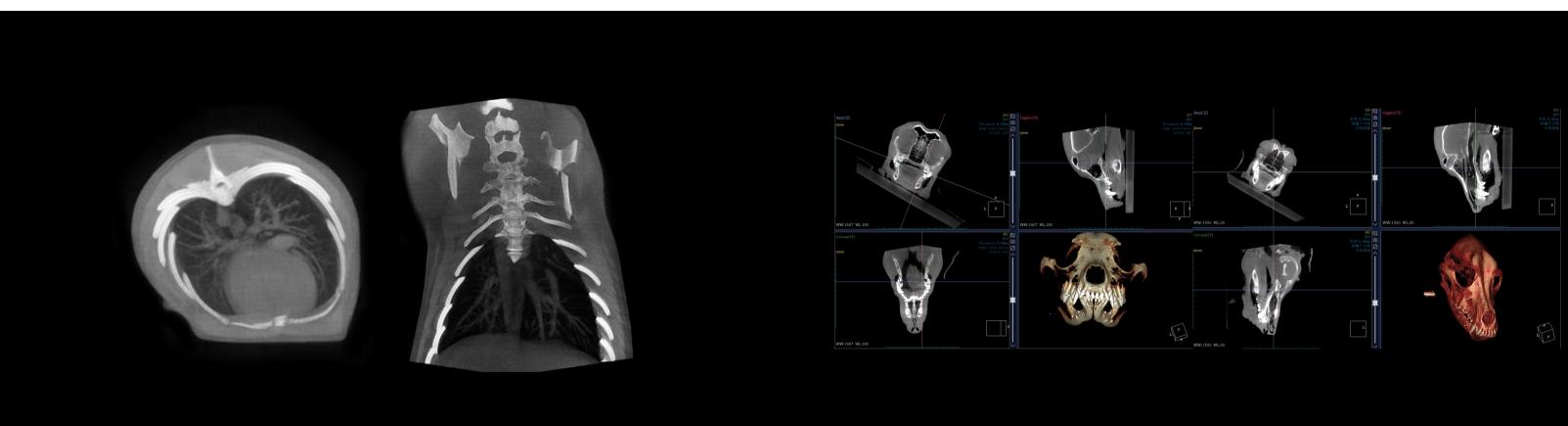
#### Fluoroscopy

Fluoroscopy enhances diagnostic efficiency and reduces the risk of missed or incorrect diagnoses by analyzing moving anatomical structures.

Clinical Application: It's primarily used in clinical settings for real-time multi-angle observation of moving organs (such as the lungs, diaphragm, and digestive tract), orthopedic surgical interventions, contrast studies of the digestive system, and imaging of the urinary system, Rrespiratory, and genitourinary systems. However, the effectiveness is limited in the imaging of cardiovascular and central nervous systems, where more advanced imaging tools need to be chosen for diagnosis.







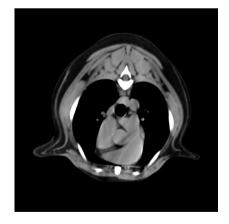
#### Maximum Intensity Projection (MIP)

Maximum Intensity Projection (MIP) technology selects the maximum density pixels for composite projection, displaying blood vessels, calcifications, bones, and soft tissues in different shades of gray. It is mainly used for the detection of pulmonary nodules, observation of blood vessel paths, fractures, tumors, osteoporosis, etc.



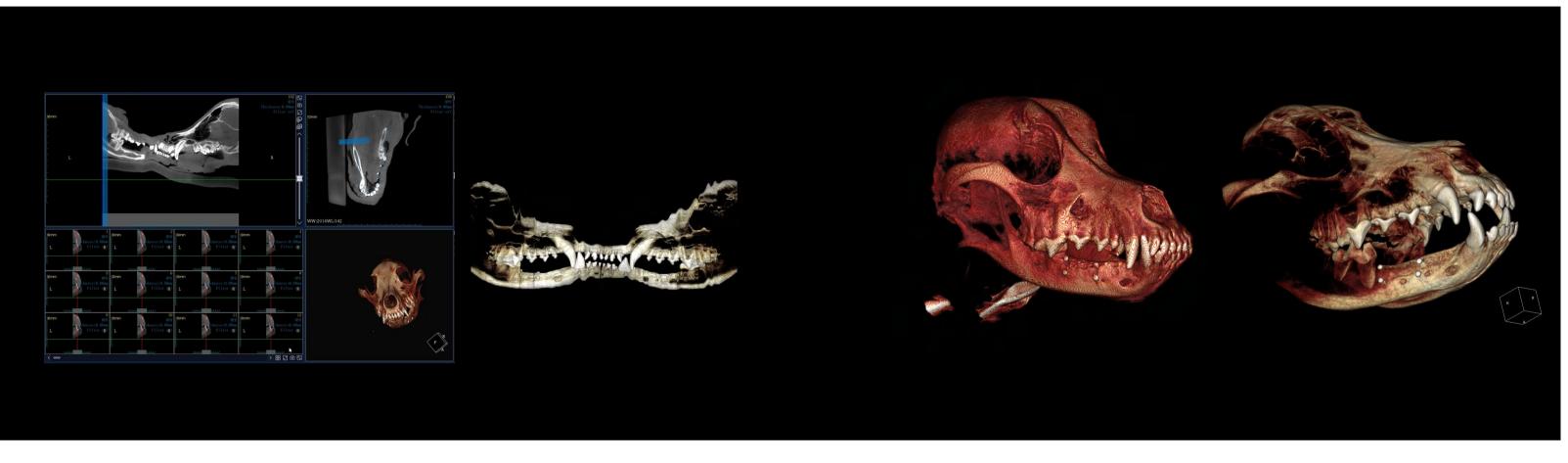
#### Multiplanar Reconstruction (MPR)

MPR is a post-processing method that 2D images of any tissue or organ level from original axial images. It can display internal structures and lesions, making it particularly useful for complex anatomical structures and organs. It is advantageous for diagnosing bone fractures, arterial dissection, and gallbladder and ureteral calculi.



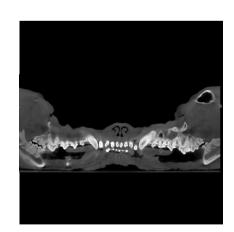
Your desirable CBCT scan within easy reach
Your desirable CBCT scan within easy reach





#### **Curved Planar Reformation (CPR)**

CPR is a post-processing tool that allows for the creation of a 2D panoramic image from the 3D volumetric data obtained from CBCT and helps visualize curved anatomical structures in a single image which is commonly used for dental evaluation.



#### VR - Skeletal Reconstruction

Skeletal reconstruction can present a 3D, intuitive, and clear representation of the normal physiological state of the bones. It has high clinical value for the development and evaluation of surgical plans for orthopedic and plastic surgery, especially in cases with complex anatomical structures and positions.



Your desirable CBCT scan within easy reach





# Extremely Fast and Efficient

- · Scan duration: 24 seconds
- · Total exposure duration: 8 seconds
- · Shortened scan duration for reduced anesthesia risks



# Smart Operation

- · Laser-assisted patient positioning
- · Motorized table moving by one touch
- · APR function for quick adjustment of parameter



### Low-radiation

· Ultra-low dose 3D imaging
Less radiation exposure to both operator and pets



# Easy Installation

- · Compatible with 110v/220v input power
- · 260kg weight reduces room load-bearing
- · Small 10m2 footprint minimizes space requirement





Low-noise Operation Less than 70 dB

Lightweight Less than 260 kg **Compact Structure** 2660 mm × 1670 mm × 1600 mm

460 mm Large Aperture Enable whole-body CT projection of most pets

**Auxiliary Positioning** Laser-assisted patient positioning

**Emergency Stop** Protecting life in case of emergencies



Storage Room A handy space for medical supplies



Table Moving by One Touch Motorized pushing, lifting and lowering

Color-changing LED strips Clear status indication

○Blue — Standby ○Orange — Expose ○Red — Emergency stop ○Green — Prepare



V-shaped Mattress and Auxiliary Belt Ideal for the immobilization of animals



**Rollers Configured** Easy movement

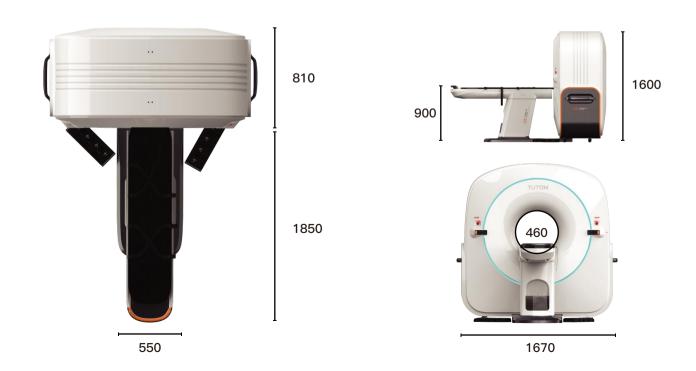




#### **Technical Specifications**

X-ray Source	Rotating anode	Scan Duration	24s
FOV	20cm×17cm	Exposure Duration	8s
Tube Voltage	40–125 kV	Weight	260kg
Tube Current	1–16mA	Scan Mode	360°rotational scanning
Focal Spot	0.3mm、0.6mm	Spatial Resolution	1.7 lp/mm
Rotational Center Aperture	460mm	Power Supply	220VAC±10% 110VAC±10%
Weight Bearing of Bed	<60kg		50HZ /60HZ
Pixel Pitch	120µm	Slice Thickness	0.24mm







Founded in 2009 and headquartered in Shenzhen, Shenzhen SONTU Medical Imaging Equipment Co., Ltd. ("SONTU") is a radiology, dental imaging, vehicle-mounted imaging, global manufacturer specializing in medical imaging equipment and a pioneer in independent development of digital X-ray detectors and digital X-ray imaging systems in China. By sticking to an innovation-driven development strategy, SONTU has achieved independent and controllable core technologies of digital X-ray image chain and system technologies. Today, it is one of the few manufacturers in the world that master mature technologies related to various core components of X-ray machines and system development. Many SONTU technologies are China's America, Africa, Asia and Europe. first and at the forefront of the industry worldwide.

SONTU has a range of products covering general and veterinary imaging, with their design and manufacturing in strict compliance with ISO13485 Medical Device-Quality Management System Requirements for Regulatory. More than 20 products have been designated as national excellent medical equipment. SONTU has been a top three supplier of static digital radiography system in China for many years, and its products have been well accepted in the international markets, including North America, South