



CRANEX[®] 3D

Dynamic
Direct
Durable

 **SOREDEX**

3D Dental Imaging System

CRANEX® 3D – Digital imaging made easy™

CRANEX® 3D is a high quality dental imaging system with panoramic, optional cephalometric and Cone Beam 3D imaging programs. Its versatility offers dental clinics one of the most dynamic imaging systems.

Summary of benefits

Dynamic

- High performance with versatile range of imaging programs
- Excellent image quality for accurate diagnostics
- RealPAN™
- Sensitive CMOS sensor with wide dynamic range
- Optimized daily workflow

Direct

- ClearTouch™ control panel
- Clear functionality simplifies operation
- SOREDEX familiar patient positioning system
- AES - Automatic exposure settings
- PickPoint™ freely selectable FOV position
- EasyScout™ for accurate 3D positioning
- Compact with small footprint

Durable

- Robust system designed for intensive use
- SOREDEX well-known patient positioning system and accessories
- Long service life
- SOREDEX technical and clinical support network

New dynamics for your practice

Available configurations

CRANEX® 3D	Pan	Ceph	3D
Panoramic	x	u	u
Panoramic Cephalo	x	x	u
Panoramic 3D	x	u	x
Panoramic 3D Cephalo	x	x	x

x = standard
u = upgradeable



CRANEX® 3D combines ease of use and top performance for demanding dental clinics. Its fresh and compact design makes it a desirable choice for dentists.

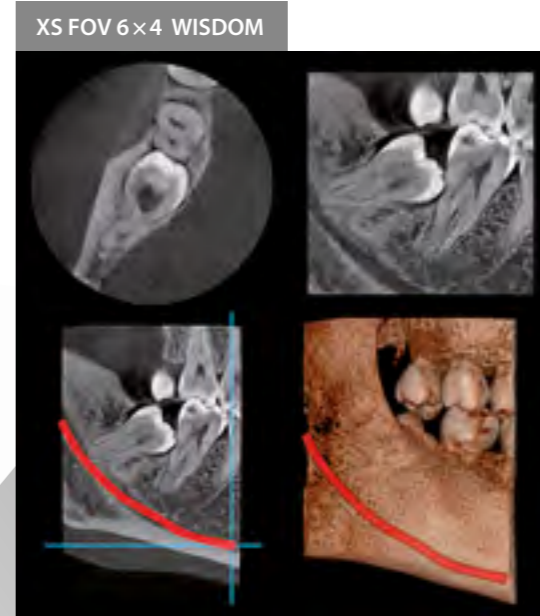
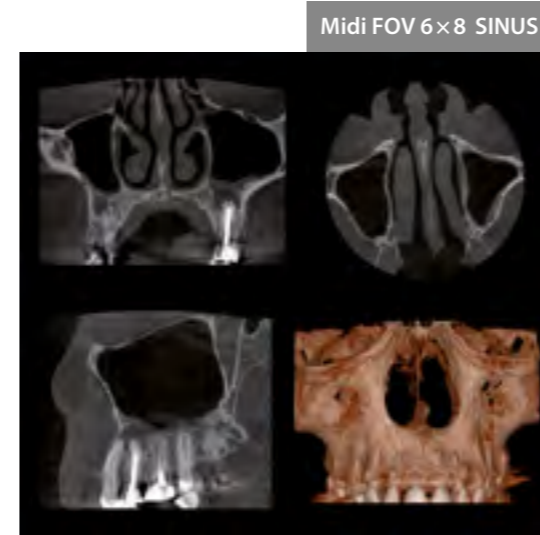
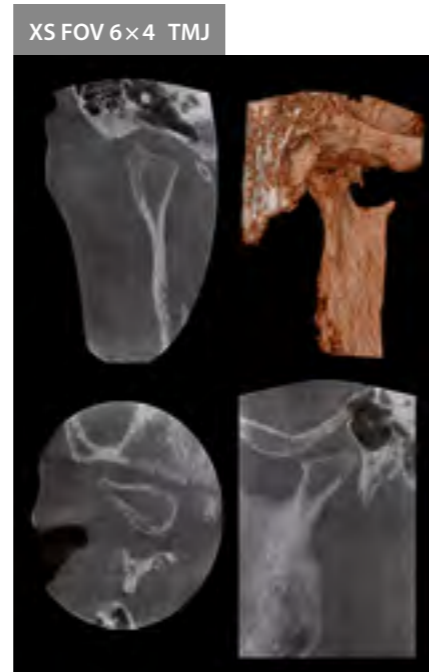
Accurate treatment planning and diagnostics with 3D

CRANEX® 3D provides dental clinics with excellent capabilities for accurate diagnostics, treatment planning and preparation of small surgeries. 3D imaging enables clinicians to see detailed anatomical structures in the finest detail from desired angles.

With two selectable fields of view and four resolution selections, CRANEX® 3D combines diagnostic accuracy, fast imaging and low dose.

CRANEX® 3D imaging application areas are:

- Implant planning
- Endodontics
- Dental and bone fractures
- Impacted teeth
- Wisdom teeth - 3rd molars
- TMJ
- Maxilla sinus
- Abnormal anatomy
- Caries



CRANEX 3D has a specific CBCT program designed for endodontic treatment, with 6 x 4 FOV size, 85 µm voxel size and SMAR enabling diagnostics of root and root canal morphology and fractures.



New Way of Viewing

SARA
SOREDEX Advanced
Reconstruction Algorithm

SMAR
SOREDEX Metal Artifact
Reduction

SARA - SOREDEX Advanced Reconstruction Algorithm visualizes small anatomical details like fractures and endodontic root fillings.*

SMAR - SOREDEX Metal Artifact Reduction reduces the effect of metals and other dense radiopaque objects on the 3D image which create artifacts that are typically seen as stripes and shadows.*

*SARA and SMAR are based on Reconstruction Algorithm Technology of PaloDEx Group.



CRANEX® 3D panoramic unit

CRANEX®3D has RealPAN™ a dedicated panoramic CMOS sensor enabling full panoramic image size and accuracy in each panoramic program.

RealPAN™ utilizes accurate and correct motion paths during its automatic operation. RealPAN™ also utilizes AI (Artificial Intelligence) to detect anatomical structures and optimize spinal compensation control. This can all be seen as a perfect and clear image.

Child panoramic has lower collimation and smaller image size, which also reduce patient dosage. Sectional panoramic images can be utilized at follow ups.

The CRANEX® 3D panoramic unit grows with the clinic's needs – a clinic can start with a panoramic unit and upgrade to CBCT or cephalometric functionality later.

Direct functionality makes imaging easy

- ClearTouch™ control panel
- AES* Automatic Exposure Settings make it easy to switch imaging programs
- Optimized total workflow

The SOREDEX® famous patient positioning system enables fast and accurate patient positioning with:

- Rigid 4-point positioning system
- Easily adjustable, self-locking temple supports
- Familiar three laser lights for accurate positioning
- Turning mirror

*AES - CRANEX® 3D has a unique AES function that provides automatic exposure settings based on patient size (SOREDEX patented technology).

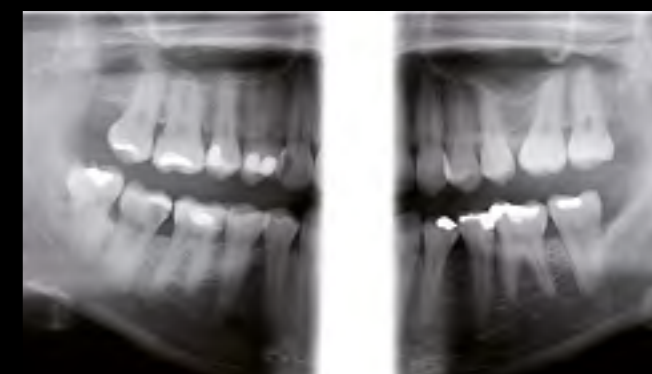
RealPAN™ for panoramic imaging



Adult panoramic



Child panoramic



Bitewing program



Partial panoramic



TMJ open and closed mouth examinations

CRANEX® 3D Flexible in Orthodontics

SOREDEX® patient positioning system: Stable head support, correct geometry and image calibration ruler in each lateral image. Cephalometric Frankfort Horizontal light assists correct patient positioning.

CBCT imaging can help to provide essential information for orthodontic treatment and diagnostics. The effect of dental deformities on a treatment plan may be difficult to estimate with 2D images, and a CBCT scan may be needed.

Most common CBCT applications in orthodontics:

- Impacted teeth, resorption related to impacted teeth position and localization
- Condition of TMJ
- Measuring bone dimensions for mini-implant placements
- Cleft palate assessment

CBCT imaging in CRANEX® 3D, with accurate FOV position, two FOVs 6x4 and 6x8, four resolutions and mA, offers an opportunity to take on image the required area exactly and also takes care of radiation dose optimization, especially with growing children.

Grows with the clinic – the unit can be easily upgraded with CBCT.



Orthodontic treatment sets high standards for panoramic and cephalometric imaging. At the same time, children's sensitivity to radiation needs to be considered. CRANEX®3D provides top performance and superior image quality with automatic soft tissue adjustment for orthodontic treatment.

- RealPAN™ - superior image quality
- Autocollimated child panoramic program and sectional panoramic for dose optimization
- AES – Automatic exposure values based on patient size for panoramic and cephalometric images
- Dose-controlled, automatic soft tissue adjustment provides full visibility of hard and soft tissue tracing points
- Cephalometric imaging provides sharp images with fast lateral scanning
- Superior image processing – advanced tools for image viewing

AES in orthodontics treatment reduces imaging values with children and helps optimize patient dose - AES functions both in panoramic and cephalometric imaging.



Full Width Lateral Program



Reduced Width Lateral Program



Posterior Anterior Program



Carpus Program
(Not available in US and Canada)

Carpus Program requires a carpus holder (separate option)

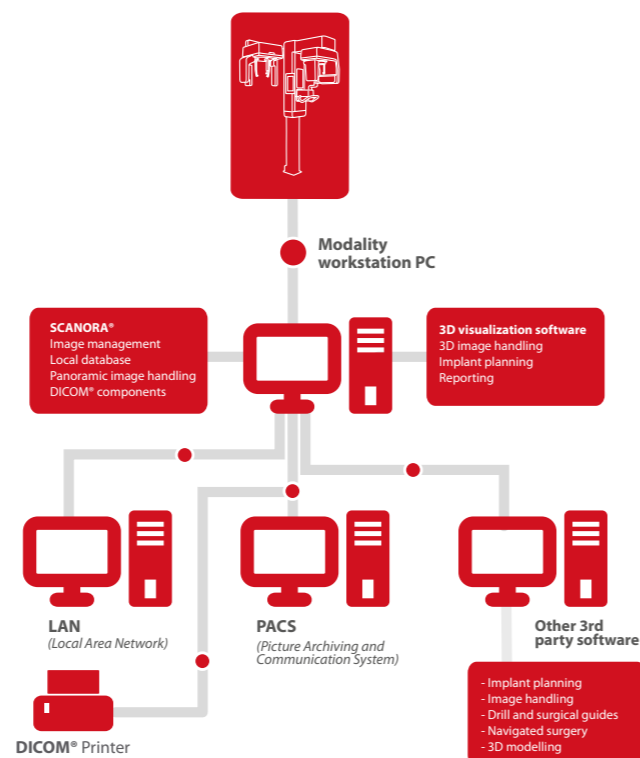
Easy adaptations to clinic's software environment

SCANORA® SW with 3D viewing and diagnostic software offers a comprehensive set of imaging tools to assist you with your daily imaging needs. Flexible software options include standard single-user and optional network multi-user versions.

Optional DICOM® services integrate CRANEX® 3D seamlessly into a PACS/DICOM® environment. SOREDEX® TWAIN connects CRANEX® 3D with 3rd party software supporting the TWAIN standard.

In addition to SOREDEX® software, CRANEX® 3D can be integrated with many practice management and 3rd party imaging software.

CRANEX® 3D has a simple-to-use Ethernet connection to your PC or network environment.



Technical data

With SOREDEX's 35 years of experience in developing high quality dental imaging systems, CRANEX® 3D provides you with a flexible high quality dental imaging system as part of the famous CRANEX® family. The robust design makes CRANEX® 3D a desirable choice for dentists due to its excellent quality, reliability and long service life.

Panoramic imaging

Sensor type	CMOS
Detector pixel size	100 µm
Resolution	spatial 6.5 lp/mm, image 5 lp/mm

Imaging programs

Adult panoramic, child panoramic, bitewing, sectional, TMJ lateral, TMJ/PA and sinus

Cephalometric imaging

Sensor type	CMOS
Detector pixel size	100 µm
Resolution	spatial 6.5 lp/mm, image 4 lp/mm

Imaging programs

Full width and child lateral, PAIAP and carpus projection (*
* Not available in US)

3D imaging

Sensor type	CMOS Flat Panel
Projections	234 - 1260 slices
Voxel resolutions (µm)	85, 130, 200, 300
XS FOV (height x diameter)	61 x 41 mm
High resolution scan time exp/scan	6.1 s/10 s
Standard resolution scan time exp/scan	2.3 s/10 s
Midi FOV (height x diameter)	61 x 78 mm
High resolution scan time exp/scan	12.6/20 s
Standard resolution scan time exp/scan	4.9/20 s

Configuration options

Panoramic	
Panoramic + Ceph (left/right)	
Panoramic + 3D	Midi FOV optional
Panoramic + 3D + Ceph (left/right)	Midi FOV optional
File format	16 bit PNG
PAN	2-4 MB
Ceph	3-5 MB
3D	25-300 MB

X-ray generator

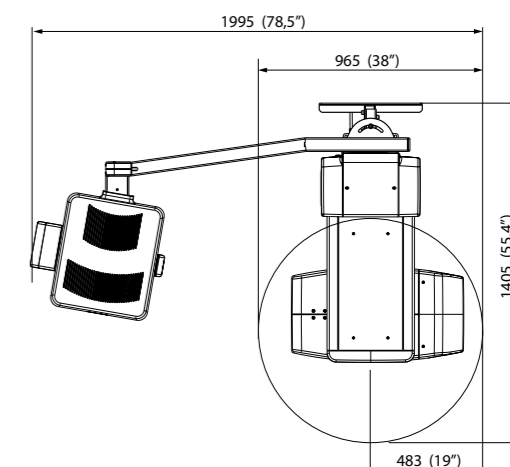
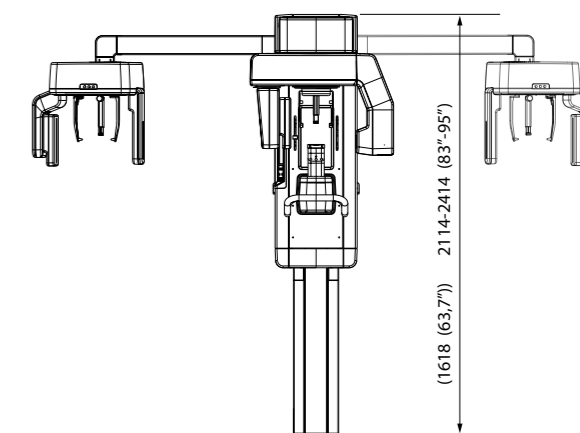
Generator	High frequency DC generator
Focal spot	0.5mm
Minimum total filtration	3.2 mm Al
Anode voltage	57-90 kV
Anode current	4-16 mA

General

Weight	200 kg (440 lbs)
Weight with Ceph	250 kg (551 lbs)
Dimensions (HxWxD)	2414 x 965 x 1405 mm
Dimensions with Ceph	2414 x 1995 x 1405 mm

Power requirements

Line voltage	220-240V / 100-120V (50/60Hz)
Warranty	2 years



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Since 1977 SOREDEX has been a leader in providing innovative imaging solutions for demanding professionals. Through continuous evolution and refinement we have set the highest industry standards for Quality, Reliability and Efficiency.

We are committed to following this path today and in the future.

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