



# SCANORA® 3D

Head to new heights with your imaging

# Benefits at a glance

# Easy

- Patient seated for added stability during exposure.
- Clear, self-explinatory symbols in the control panel, quick to learn and operate.
- Fully motorized chair and chin rest for FOV positioning without moving the patient.

# Effective

- Excellent image quality in both 3D and 2D.
- Fast scanning times, 10 to 26 seconds depending on selected FOV.
- Less than 1-minute reconstruction time for greater efficiency.

### Versatile

- Optional RealPan<sup>™</sup> CCD sensor for high quality 2D panoramic images with correct imaging geometry, no manual sensor change thanks to AutoSwitch<sup>™</sup>.
- Powerful software tools and features.
- Compatible with leading image guided surgery navigation systems.

# The solution for dentomaxillofacial and ENT imaging

SCANORA® 3D features Cone Beam tomography and optional 2D panoramic imaging combined in one. Built for practices offering multi-specialty treatment services, the SCANORA® 3D is a compact package. It helps the clinicians to perform accurate diagnostics, precise treatment planning for implant, ENT and oral surgery, and efficient follow-up on the treatment.







# Excellent diagnostic performance

SCANORA® 3D system offers a modern way of seeing dentomaxillofacial anatomy and solving diagnostic tasks. In dentomaxillofacial radiology the high-definition panoramic image normally is the starting point that shows the regions that need further investigation.

The optimum 3D technique for a specific task can be easily selected, images thoroughly interpreted with the 3D image handling software, treatment planned and finally follow-up studies done. All this can be carried out with the efficient SCANORA® 3D system.

# Proper selection of fields-of-view



The small FOV is ideal for localized problems. A cyst in mandible as an example.



The medium FOV can display all the teeth in one image.







The optional XL FOV shows the whole dentomaxillofacial area.

# Ideal for implant dentistry

For proper implant site selection, accurate information is needed about the available bone, its quality, and the exact location of critical areas. The location of the mandibular nerve canal and maxillary sinus can be obtained accurately and easily.

With the help of a multiplanar slice display, 3D rendering, measurement tools, and comprehensive implant symbol library, implant planning and oral surgery can be carried out efficiently and safely.



An example of the planning tools.

For third party drill guide systems the volume data can be exported in DICOM format. Through DICOM support, SCANORA<sup>®</sup> 3D system integrates with other imaging software and modalities and is compatible with most specialty third-party software, drill and surgical guide applications.

# Expand your view in the ENT area



With the software you can view coronal, axial and sagittal projections similarly as with conventional medical CT, but with much higher resolution.



Powerful 3D visualization features in the software allow you to see air passages and bony structures side by side with CT images.

# Smooth workflow with RealPAN<sup>™</sup>

In most examinations a panoramic image is the first step and provides an overview of the whole dentition. With the panoramic option, the SCANORA® 3D provides the speed and efficiency of traditional panoramic imaging.

SCANORA® 3D uses a dedicated CCD sensor (optional) for high-quality panoramic imaging. The unique, patented AutoSwitch<sup>™</sup> feature changes automatically between panoramic and 3D modes.

SCANORA<sup>®</sup> 3D system has been designed to optimize your workflow. The AutoSwitch<sup>™</sup> feature, easy patient positioning, short scan and image reconstruction times ensure speed and efficiency.





Excellent quality, traditional full field panoramic images with a dedicated panoramic sensor.

Lower dose and better resolution than with synthesized pan from 3D image.

No risk of dropping or damaging the integrated sensor.

Low dose 3D imaging

X-ray imaging is optimization between image quality and x-ray dose. With SCANORA®3D this has been successfully resolved by combining high image guality with low dose. The key factors in achieving this are sophisticated x-ray generation, selectable imaging modes, a state-of-the-art flat-panel detector and innovative image reconstruction technology.

The x-ray dose in all the fields-of-view of SCANORA® 3D is low. The minimum effective dose can be compared to one digital panoramic exposure and, at maximum, to a few panoramic exposures for a larger field-of-view and higher resolution.

# **DOSE COMPARISON**



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# Performance ALARA\*

Building on the ALARA\* principle, the diagnostic performance and the low dose are achieved by pairing pulsed radiation and half beam technology.

ALARA\* = As Low As Reasonably Achievable

# Freedom of movement

Four adjustable Fields of View ranging from 60 x 60 mm to 130 x 145 mm provide the view for each task in the entire Head & Neck area.

SCANORA® 3D gives you the ability to carefully minimize the dose according to the diagnostic task, whether it is a question of detailed primary diagnostics or a follow-up study. It is a safe and efficient diagnostic tool for your clinic.

For more exact information. please refer for instance to research of the SEDENTEXCT: Pauwels et al. Effective dose range for dental cone beam computed tomography scanners. European Journal of Radiology. doi: 10.1016/j.



# Open software architecture

SCANORA® 3D produces image data in DICOM<sup>\*</sup> format. With its open architecture it allows versatile and optimized software solutions to be tailored for your practice. The local area network (LAN) with several viewing stations is the solution for most practice applications allowing the system to be linked with the network and system server.

SCANORA<sup>®</sup> software is the main platform, including the local patient image database and panoramic image handling.

3D visualization software provides 3D image handling, diagnostic and implant planning. Freely distribute clinical cases on CD/DVD to referring clinicians. The referring clinician can utilize the free viewer without investing in special software or import the images in DICOM format into their own 3D software.

\* Digital Imaging and Communication in Medicine

# 3D Imaging fields-of-view and specifications

FOV [Height × diameter]	Resolution	Voxel size [mm]	Scan/ Exposure time [s]	Total image processing time approx. [minutes]
<b>3D Small</b> 60×60 mm	Standard	0.20	13/3	1
	High	0.133	20/4.5	2
<b>3D Medium</b> 75×100 mm	Standard	0.30	11/2.5	1
	High	0.20	16/3.75	2
<b>3D Large</b> 75×145 mm	Standard	0.35	10/2.25	1
	High	0.25	13/3	2
<b>3D XL</b> 130×145 mm	Standard	0.35	20/4.5	2
	High	0.25	26/6	4

# 3D image receptor

Receptor type	CMOS Flat Panel
Receptor active area	124mm  imes 124mm

### Panoramic image receptor (Optional)

Technology	CCD
Detector size (H×W)	146mm  imes 6mm

# Panoramic imaging programs (Optional)

Adult panoramic program Pediatric panoramic program TMJ programs

### X-ray generator

Tube	Fixed anode tube
Focal spot	0.5 mm IEC 60336
Target angle	5 degrees
kV	60-90
mA	4.0-12.5

### General

Lin

Weight	310 kg (690 lbs)
Dimensions (HxWxD)	1973 mm×1600 mm
	×1400 mm
	(77.7"×63"×55.1")

# **Power requirements**

voltage	8 A, 230-240 VAC
	(±10 %), 50/60 Hz

# Technical data







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# Digital imaging made easy<sup>TM</sup>

SOREDEX designs, manufactures and markets easy to use and innovative imaging solutions for dental and maxillofacial professionals. SOREDEX portfolio covers wide range of applications from intraoral, panoramic, cephalometric extending to large field-of-view cone beam CT for demanding ENT and CMF diagnostics. Close co-operation with imaging professionals give us deep insight of how to incorporate true diagnostic value to clinical work.

Our products are known for reliability, simplified workflow and excellent image quality. We are committed to fulfill these promises today and in the future.

SCANORA<sup>®</sup>/AutoSwitch<sup>™</sup>/RealPAN<sup>™</sup>/Digital imaging made easy<sup>™</sup> is a registered trademark / a common law trademark of SOREDEX. Other product names and trademarks are the property of their respective owners. CE-marked, NB (CE) number 0537.

Electrical safety meets the IEC 60601-1 standard. Manufacturing complies with ISO 13485:2003, ISO 9001:2008 and ISO 14001:2004.

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