Planmeca
ProMax® 3D s
ProMax® 3D Classic

PLANMECA

Planmeca ProMax® 3D s
Planmeca ProMax® 3D Cla ssic

Genuine all-in-one units

*Our **Planmeca ProMax® 3D s** and **Planmeca ProMax® 3D Classic** units are designed to obtain complete information on your patient's anatomy in the minutest detail. These intelligent and multipurpose X-ray units provide digital panoramic, cephalometric and 3D imaging as well as 3D photos and 3D model scans.*

Full range diagnostics

Both **Planmeca ProMax® 3D s** and **Planmeca ProMax® 3D Classic** X-ray units comply with a multitude of diagnostic requirements: those of endodontics, periodontics, orthodontics, implantology, dental and maxillofacial surgery, and TMJ analysis. The images can be taken anywhere within the maxillofacial region.

One X-ray unit for all your imaging needs

Thanks to the unique, technologically advanced design, any **Planmeca ProMax® 2D** unit can be upgraded to a CBCT (Cone Beam Computed Tomography) unit. As a result, one X-ray unit can meet virtually all your needs in maxillofacial imaging.
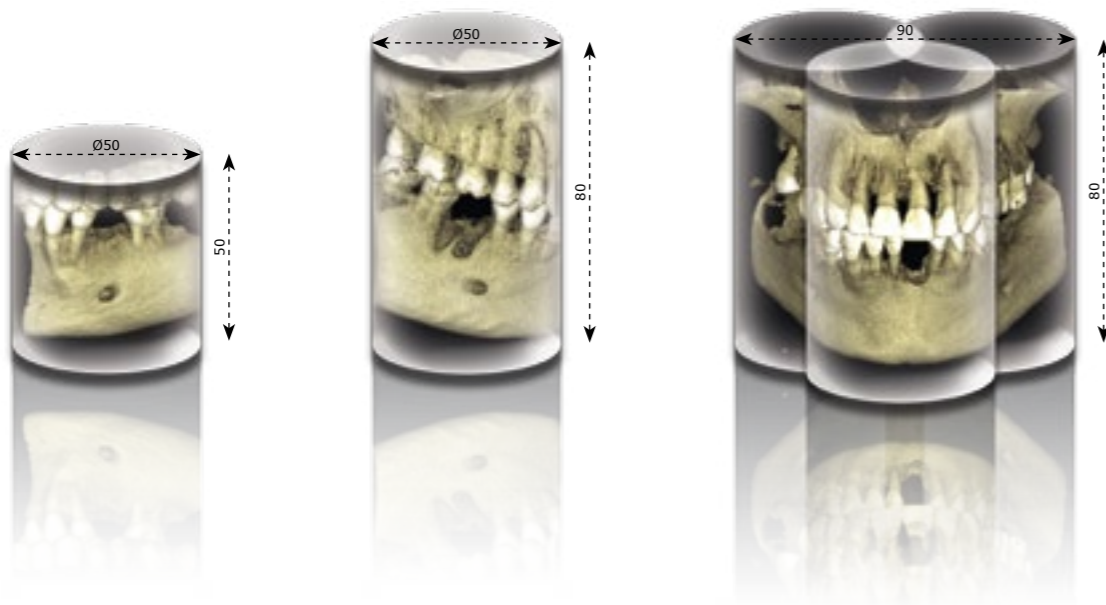
Learn more:
Planmeca Showroom

Available on the
App Store

for iPad

Planmeca ProMax® 3D s

Ideal for capturing small details

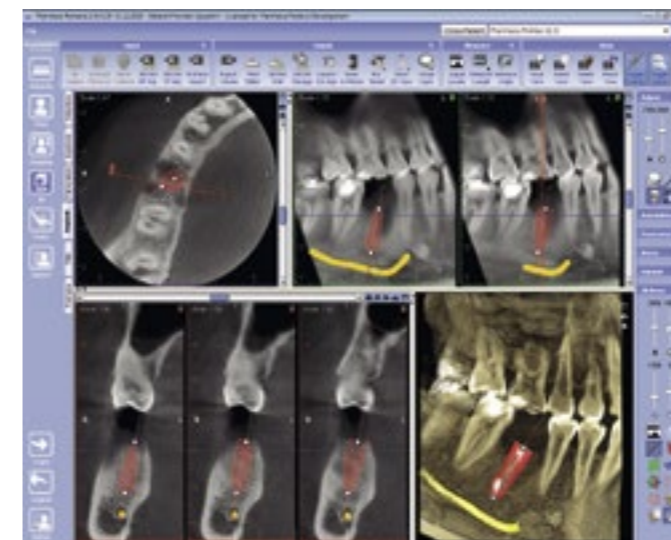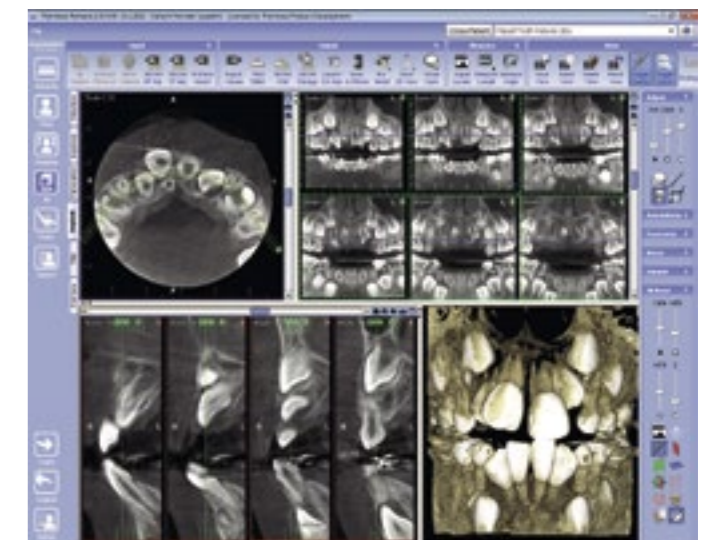| Standard volumes (child mode)	Ø50 x 80 mm (Ø42 x 68 mm)
	Ø50 x 50 mm (Ø42 x 42 mm)
Triple scan	90 x 60 x 80 mm

Triple scan image

Planmeca ProMax® 3D s is ideal for imaging with a smaller Field of View. The imaging size is optimal for e.g. endodontic, single implant and wisdom tooth cases, as well as for orthodontic and periodontal treatment. The basic volumes can also be stitched together to generate a larger view of your patient's anatomy – up to 90 mm in width.
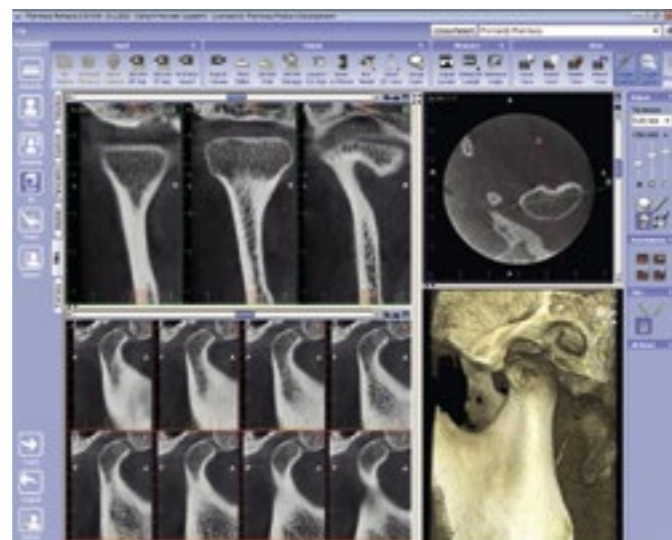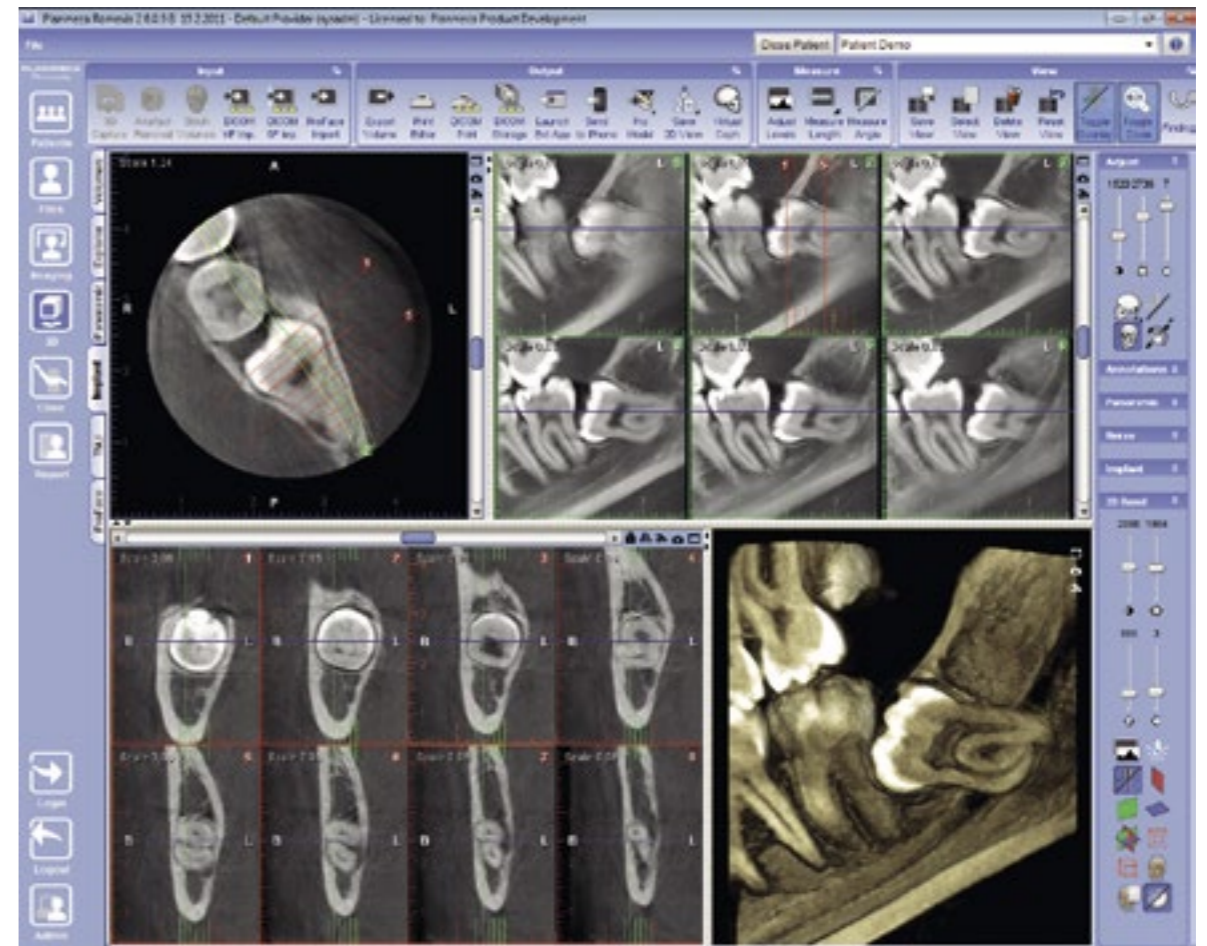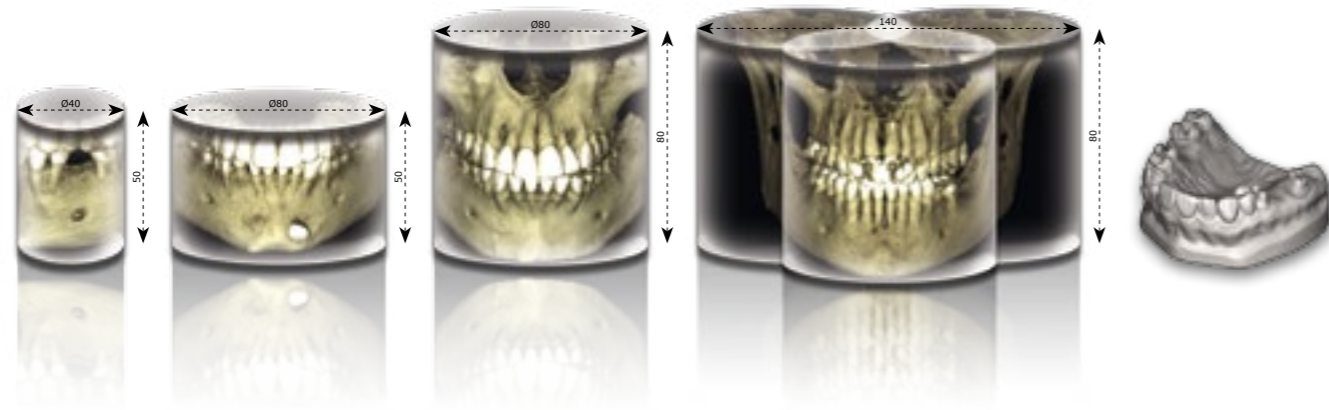

TMJ study

Implant planning

Orthodontic case

Planmeca ProMax® 3D Classic

Covers the whole dentition area

| Standard volumes (child mode)	Ø80 x 80 mm (Ø68 x 68 mm)
	Ø80 x 50 mm (Ø68 x 42 mm)
	Ø40 x 80 mm (Ø34 x 68 mm)
	Ø40 x 50 mm (Ø34 x 42 mm)
Triple scan	140 x 105 x 80 mm

Wisdom tooth extraction

With **Planmeca ProMax® 3D Classic**, study volume sizes can be selected to meet your diagnostic needs without excess radiation outside the area of interest. The Ø80 x 80 mm image size is optimal for most diagnostic applications that require including the whole dentition, mandible, and maxilla in the same study volume. The Ø80 x 50 mm volume can be used for single views of the mandible or maxilla, and the small Ø40 x 50 mm volume is intended for molar area studies or for planning 3rd molar extractions. The basic volumes can also be stitched together to generate a larger view of your patient's anatomy. A special high definition program is developed for imaging of small size ear bones. The unit also offers a special program for scanning impressions and plaster casts.

3D study in **Planmeca Romexis®** 3D Explorer
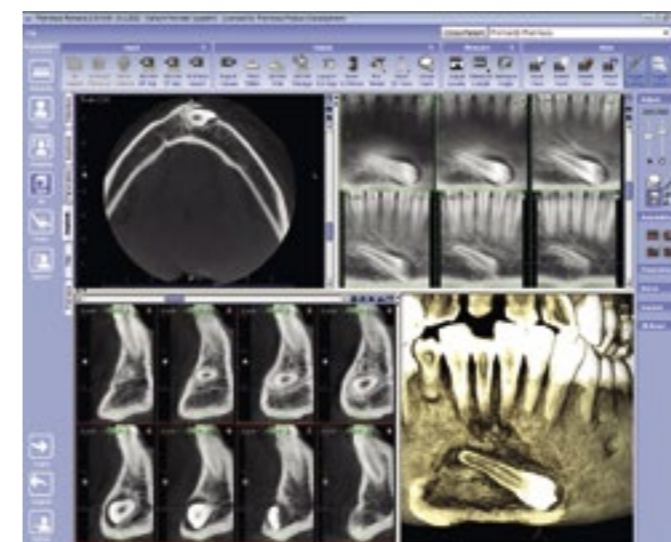
Impacted canine
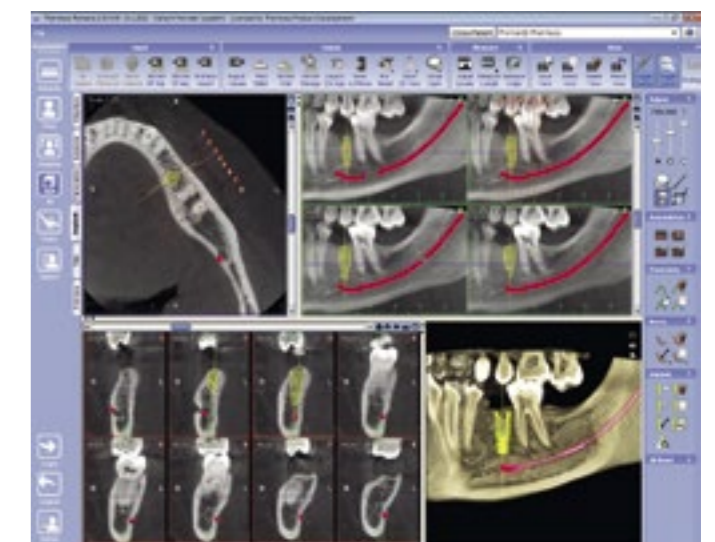
Implant case

3D face photo

Planmeca ProFace® is an exclusive 3D face photo system available for all of our 3D X-ray units. This pioneering integrated system produces a realistic 3D face photo and CBCT image in a single imaging session. You can also take a separate 3D face photo without exposing your patient to any radiation.
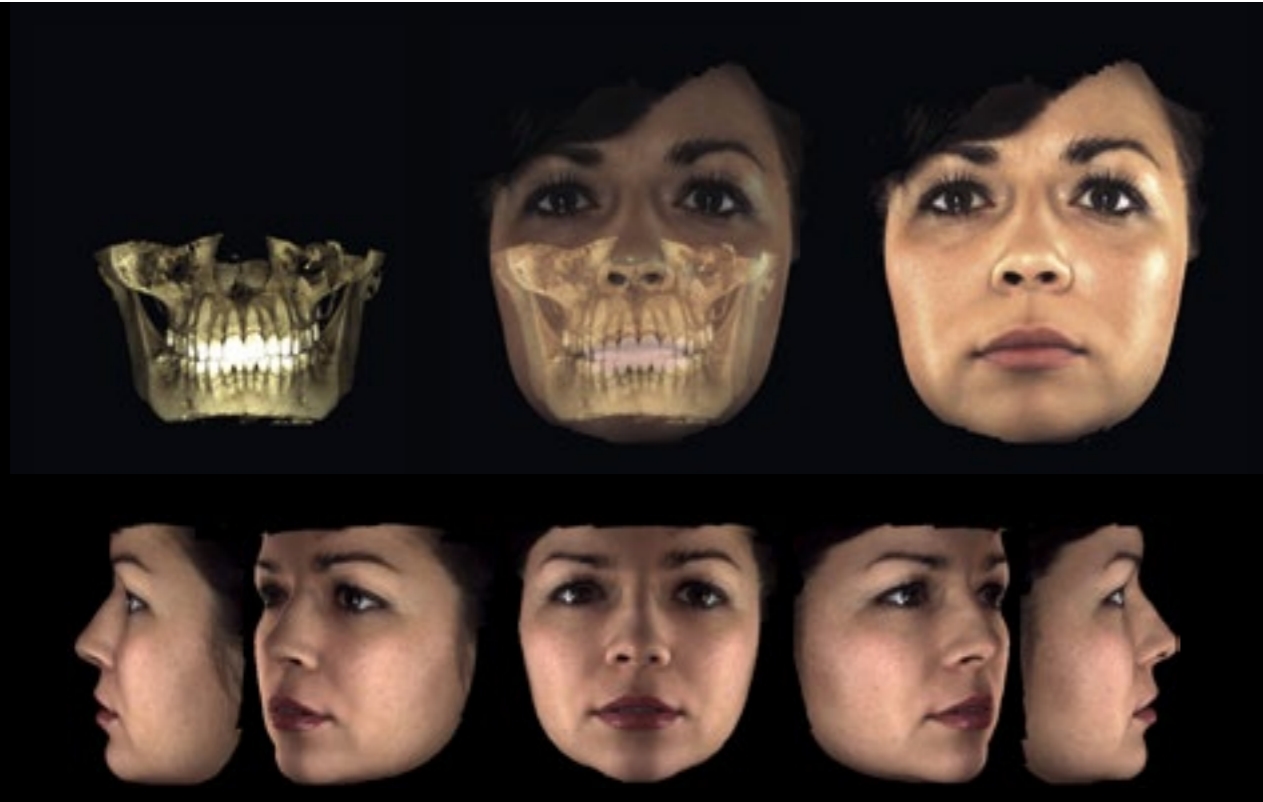
Planmeca ProFace® – the face in 3D

Designed to fulfil the most diverse diagnostic needs of today's maxillofacial and dental professionals, **Planmeca ProFace®** is a highly effective tool for pre-operative planning and treatment follow-up. It's also ideal for patient motivation and for sharing information with colleagues.

Safer and faster facial surgery

The 3D photo visualises soft tissue in relation to dentine and facial bones. As both a CBCT image and a 3D photo are generated in one imaging session, the patient position, facial expression, and muscle position remain unchanged – resulting in images that are perfectly compatible.

Careful pre-operative planning – where you can study the facial anatomy thoroughly using our **Planmeca Romexis®** software – facilitates accurate and detailed operations and enhances the aesthetic result.

3D model scanning

*You can use all X-ray units in the **Planmeca ProMax® 3D** family to scan both impressions and plaster casts – an exciting feature that was an industry first for our CBCT units. And with our advanced **Planmeca Romexis®** software, the digitised models are available immediately and stored for later use.*
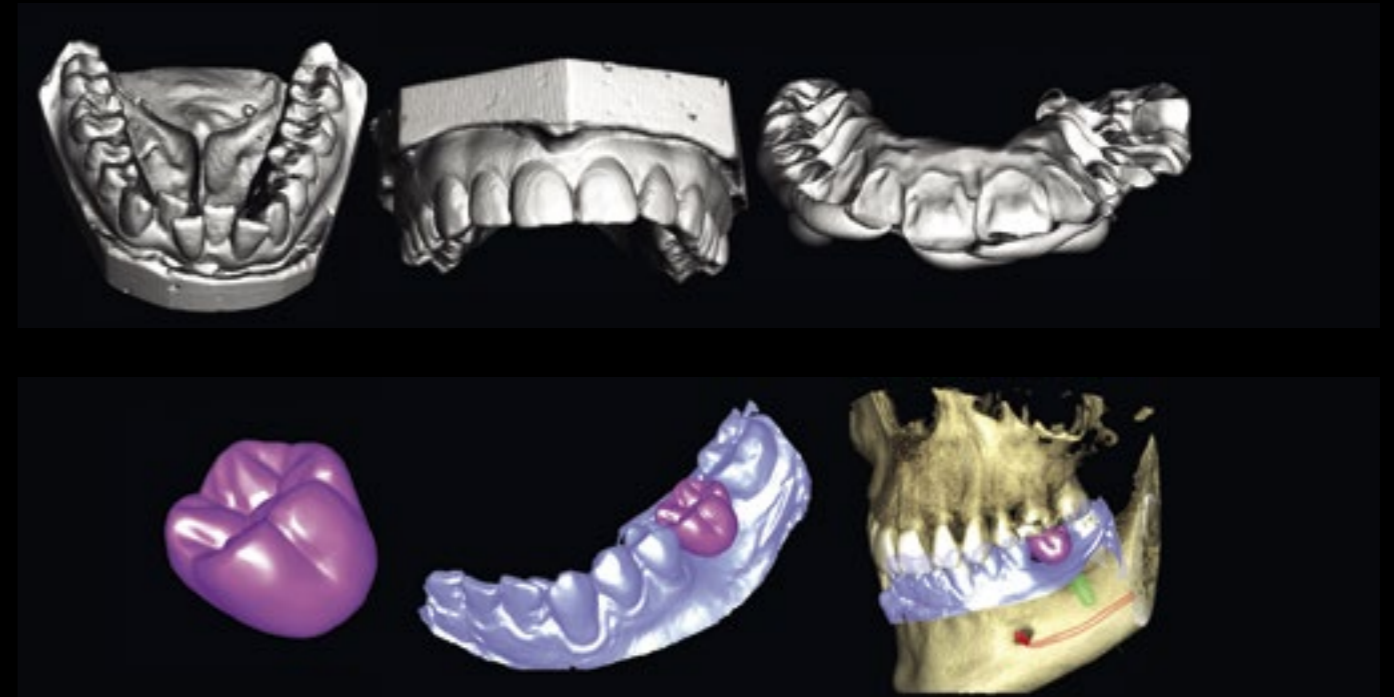
Digital models save space

3D digital models are stored in the **Planmeca Romexis®** database in standard STL format, which reduces the need to make or maintain physical plaster casts.

Create your virtual patient

The scanned 3D model can be superimposed on to CBCT data, creating a virtual patient and helping you with all your clinical and treatment planning needs. The combined data set provides an artefact-free model of your patient's dentition including bone, crowns and soft tissue. This offers valuable new options for implant planning, surgical guide manufacturing, orthodontic purposes and orthognathic surgery.

Scanning a plaster cast to a digital model

Scanning an impression to a digital model

2D and 3D imaging with one sensor

SmartPan™

*Our advanced **SmartPan**™ imaging system uses the same 3D sensor also for 2D panoramic imaging.*

Extraoral bitewings

Planmeca ProMax *extraoral bitewings are ideal for periodontics, elderly and child patients, claustrophobic patients, patients with a strong gag reflex, and patients in pain. Extraoral bitewings enhance clinical efficiency and take less time and effort than conventional intraoral bitewing imaging.*
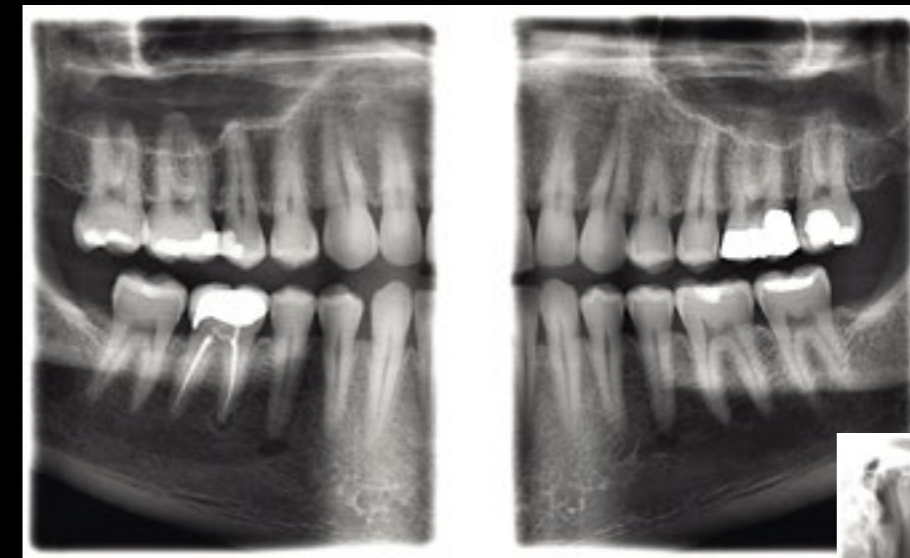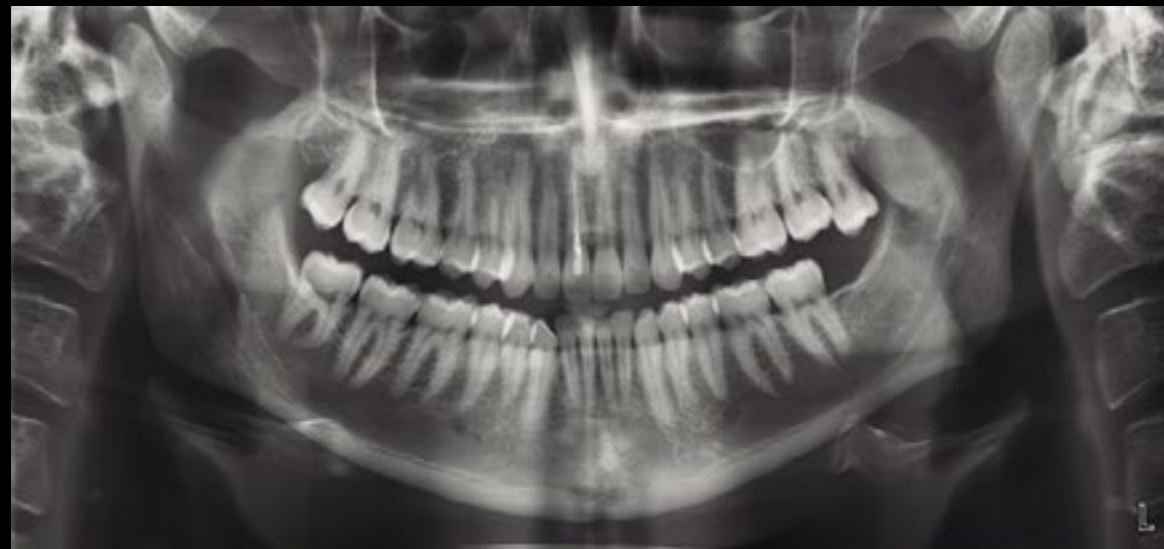
True Bitewing program, adult

Standard panoramic image of the same patient as the bitewing above

2D SmartPan™
Unique panoramic imaging

- A unique system for 2D imaging
- Uses the same 3D sensor for 2D panoramic imaging, eliminating the need to change sensors
- Calculates 10 different panoramic curves in 2 mm shifts, automatically adjusting the sharpness to one layer
- Users can browse between panoramic images and select the most suitable one for diagnosis

2D programs

Basic panoramic programs	Standard panoramic Lateral TMJ (closed & open) PA TMJ (closed & open) PA sinus
	Horizontal and vertical segmenting for panoramic program
	Bitewing
Advanced panoramic programs	Interproximal panoramic Orthogonal (perio) panoramic Lateral-PA TMJ Lateral multiangle TMJ PA multiangle TMJ PA non rotational sinus Lateral non rotational sinus
Tomography programs	Digital linear tomography and Transtomography
	Child (Paediatric) mode for each program to reduce the dose

Advantages of extraoral bitewings

- Ideal for all patients – no sensor positioning required
- Consistently opens interproximal contacts, giving better diagnostic value
- Larger diagnostic area than in intraoral modalities
- More clinical data: canine to third molar
- Enhanced clinical efficiency – takes less time and effort than conventional intraoral bitewings
- Enhanced patient experience and comfort – eliminates gagging

True bitewings only possible with our SCARA3 technology

Ease of operation

Our **Planmeca ProMax® 3D** units are known across the world for incredible ease of use and exceptional patient comfort. A relaxed patient means a smooth imaging workflow and the best quality images.
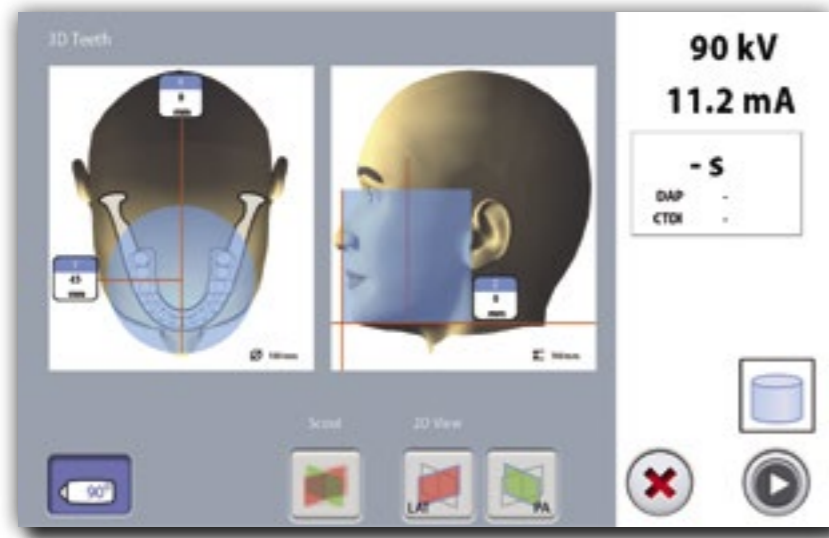
User-friendly control panel

- Clear and straightforward graphical user interface guides you smoothly through the work process

- Pre-programmed sites and exposure values for different image types and targets save you time and allow you to focus on your patients

Open patient positioning

- Effortless positioning with open-face architecture

- Unrestricted view of your patient

- No claustrophobic feeling for your patient

- Fine adjustment using positioning lasers and joystick

- Verify correct positioning with a scout image

- Easy wheelchair accomodation with side-entry access

Image quality and dose in perfect balance

Pulsed X-ray radiography reduces the patient dose considerably and creates a stroboscopic X-ray effect. Together with the short rotation scan it eliminates artefacts, contributing to the exceptional image quality.
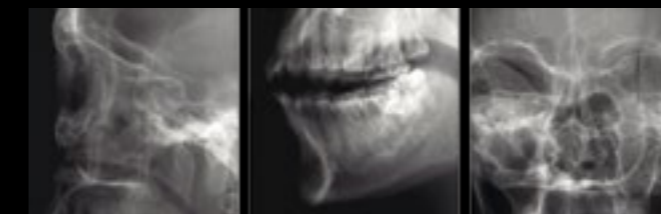
SCARA technology

The precise, free-flowing, computer-controlled SCARA (*Selectively Compliant Articulated Robot Arm*) arm construction can produce any movement pattern required. This enables accurate and reliable volume positioning and volume diameter adjustment, reducing the amount of radiation your patients are exposed to.

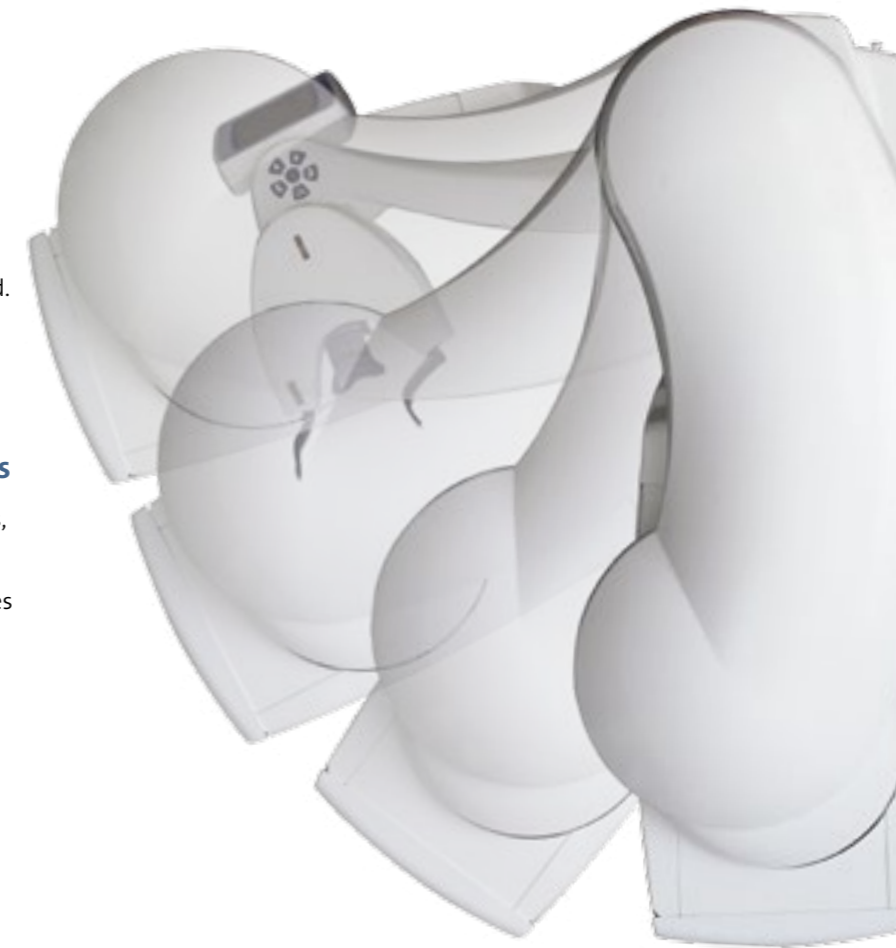### Easy imaging with ready-designed protocols

- Imaging protocols designed for specific diagnostic tasks, areas, or target sizes

- Appropriate volume size, resolution, and exposure values

- Automatic selection and adjustment of the target position

- **Reduced volume sizes for child patients** to prevent unnecessary radiation

ROI for higher resolution images

The ROI (Region of Interest) reconstruction function can generate a new small voxel volume from the image data of a previously taken large voxel volume. This enables more precise diagnosis without the need for an additional radiation dose for the patient.

Optimised imaging modes for different needs

- **Low dose** mode takes the image with a minimal dose of radiation.
  Suitable for child patients in orthodontic studies. Voxel size 400 μm

- **Normal** mode is the best choice for most common imaging needs. Voxel size 200 μm

- **High definition** mode is designed for imaging of small objects, such as ear bones . Voxel size 150 μm

- **High resolution** gives more detail, when necessary. Voxel size 100 μm

- **Endodontic** mode offers the best resolution with the smallest size. Voxel size 75 μm

Scout images and 2D views help positioning and can even be used in preliminary diagnosis.

Quality cephalometry for orthodontics

We offer exceptional equipment and the most advanced software for all your orthodontic needs.

Two available options:

One-shot Planmeca ProCeph™ cephalostat

- Effective one-shot cephalostat

- Short exposure time – no motion artefacts, low patient dose

- Image sizes from 18 x 25 cm to 30 x 25 cm

Scanning Planmeca ProMax® cephalostat

- Digital cephalostat that scans your patient's head horizontally using a narrow X-ray beam with an extremely low effective dose of radiation

- Exceptional flexibility in image formats, with field sizes of up to 30 x 27 cm

Cephalometric imaging with Planmeca ProMax® units

- The functional and easy-to-use head positioner ensures accurate positioning for all cephalometric projections

- The carbon fibre ear posts and nasal positioner are extremely stable, hygienic, and transparent to radiation

- The unit automatically aligns itself to take cephalometric exposures and then selects a corresponding collimator

- The rotating tube head in the 3D unit eliminates the need to remove the 3D sensor

Easier and more accurate than ever before

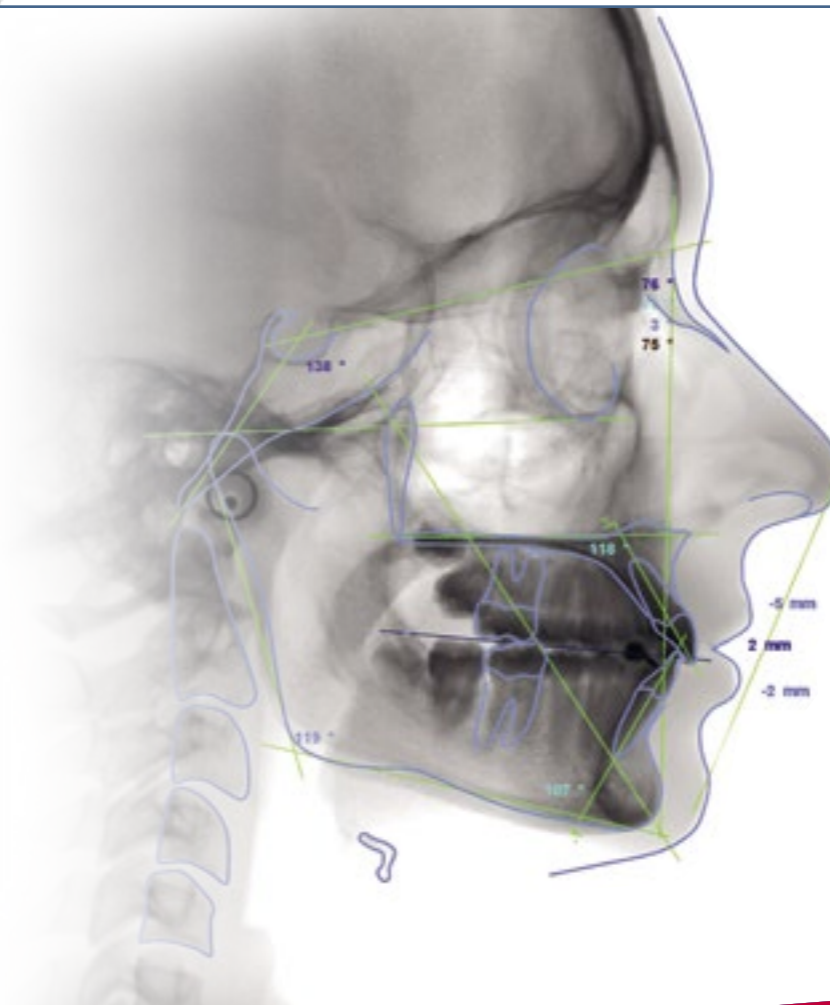### Planmeca Romexis® Cephalometric Analysis module

- Create cephalometric analyses and superimpositions in minutes

- Fully customisable analyses, norms and reports

- Microsoft Excel export and import function

- Compatible with Windows operating system

Planmeca Romexis® – reinventing 3D imaging

Planmeca Romexis® is an advanced, easy-to-use software suite providing a rich set of tools to meet the imaging requirements set by any dental facility – from a small clinic to a large hospital. It supports the most versatile range of 2D and 3D imaging modalities.

Mac OS and Windows compatible
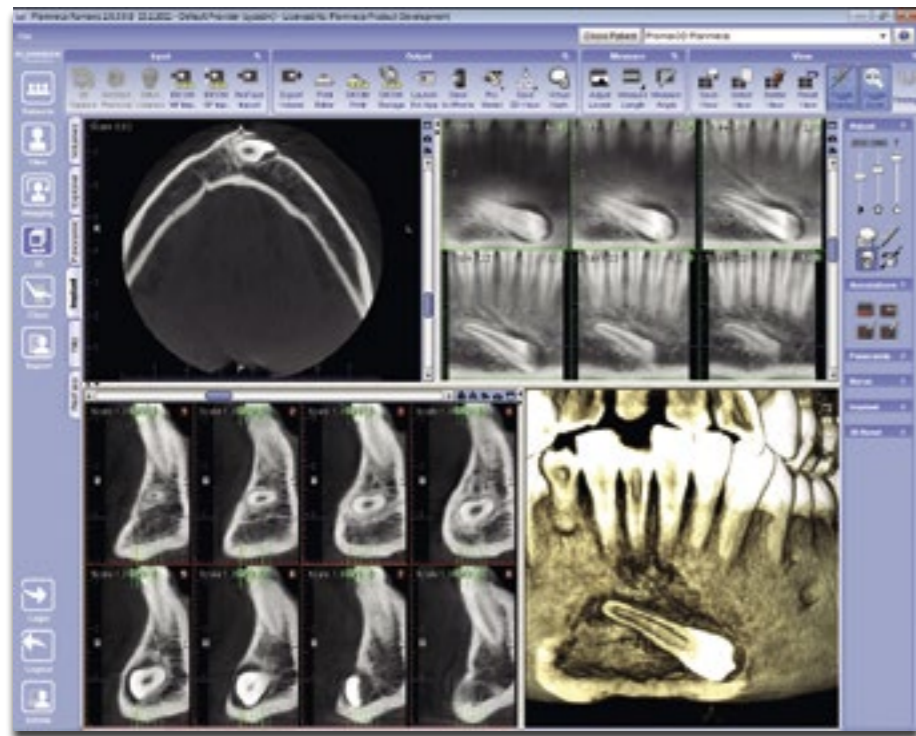
Excellent tools for quality images

With a complete set of tools for image viewing, enhancement, measurement, drawing and annotations, **Planmeca Romexis®** improves the diagnostic value of radiographs. Versatile printing and image import and export functionalities are also included. The software consists of different modules – so you can choose those most suited to your needs.

Convenient 3D diagnosis

The Planmeca Romexis 3D rendering view gives an immediate overview of the anatomy and serves as an excellent patient education tool. The images can be instantly viewed from different projections or converted into panoramic images and cross-sectional slices. Measuring and annotation tools – such as nerve canal tracing – assist in safe and accurate treatment planning.

Easy sharing of results

Studies can be quickly converted into multi-page printouts or handed out with the free **Planmeca Romexis® Viewer** media. Cases can be seamlessly transferred to mobile devices or partner clinics that also use Planmeca Romexis.

Best compatibility with other systems

Planmeca Romexis offers excellent compatibility with other systems, allowing you to freely use third-party products at your clinic. TWAIN support and DICOM standard compliance ensure that our flexible software can be used effortlessly with most systems.

Free Planmeca Romexis® Viewer application

- Full-featured viewer application
- No installation required
- Mac OS and Windows support
- Distribute to specialists or patients

Easy and powerful tools

*Our pioneering **Planmeca Romexis®** software offers specially designed tools for implantologists, endodontists, periodontists, orthodontists, maxillofacial surgeons, and radiologists. You can also view your images wherever you are using our mobile apps, and enjoy unmatched compatibility with other systems.*
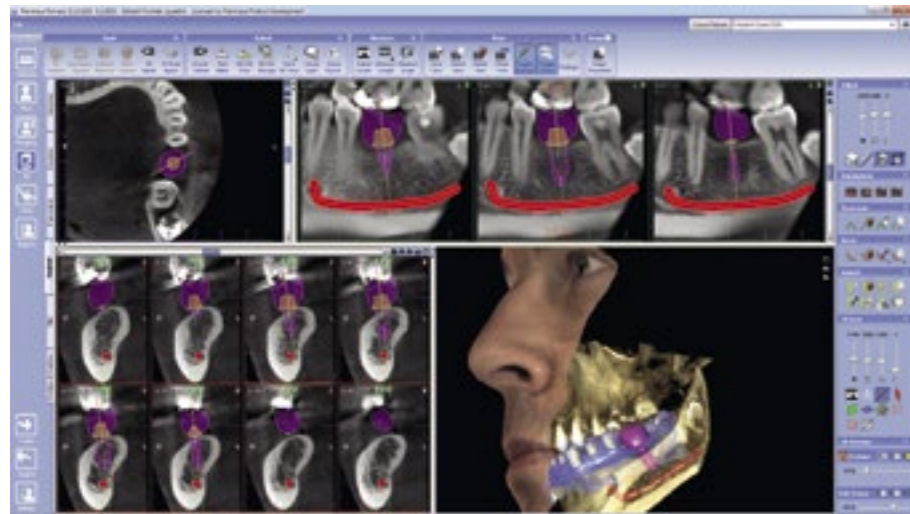
Implant planning made easy

Our **Planmeca Romexis® 3D Implant Planning** module offers the most sophisticated tools to meet all the needs of modern implantology.

Planmeca Romexis® allows easy planning and verification of implant placement using realistic implant, abutment and crown models from our Planmeca Romexis libraries. You can then import and superimpose a soft-tissue scan and crown design with CBCT data – providing you with the perfect environment for implant planning.
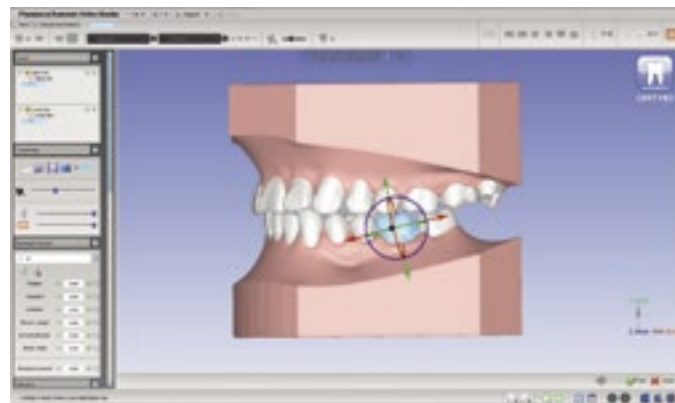
3D tools for orthodontists and dental labs

Planmeca Romexis® 3D Ortho Studio brings innovative tools for orthodontists and dental laboratories. Our advanced module is designed for the examination and analysis of digital dental models scanned with **Planmeca ProMax® 3D** X-ray units – and also for planning orthodontic treatments in 3D.

Share images and expertise online

Planmeca Romexis® Cloud is an advanced image transfer service exclusive to **Planmeca Romexis®** users. Now you can share images and expertise securely with all partners who use Planmeca Romexis, the free **Planmeca Romexis® Viewer** or the **Planmeca iRomexis™** mobile application.

Anybody, anywhere

Planmeca Romexis® Cloud

Planmeca Romexis® user

Your mobile world of imaging

Access your images from anywhere in the world with our advanced mobile application. Consult your colleagues and communicate with your patients easily – wherever you are.

Planmeca iRomexis™

Planmeca iRomexis is a mobile companion application for the **Planmeca Romexis** imaging software. It is specially designed for iPhone and iPad to view 2D and 3D images, 3D models and **Planmeca ProFace®** images.

View all images taken with your Planmeca X-ray unit and communicate with your patients. Carry images on your mobile device – discuss with other professionals wherever you go. Experience a new level of freedom and co-operation with Planmeca iRomexis.

The application can be downloaded from the App Store free of charge.

True 2D and 3D imaging:
Planmeca iRomexis™

Available on the App Store
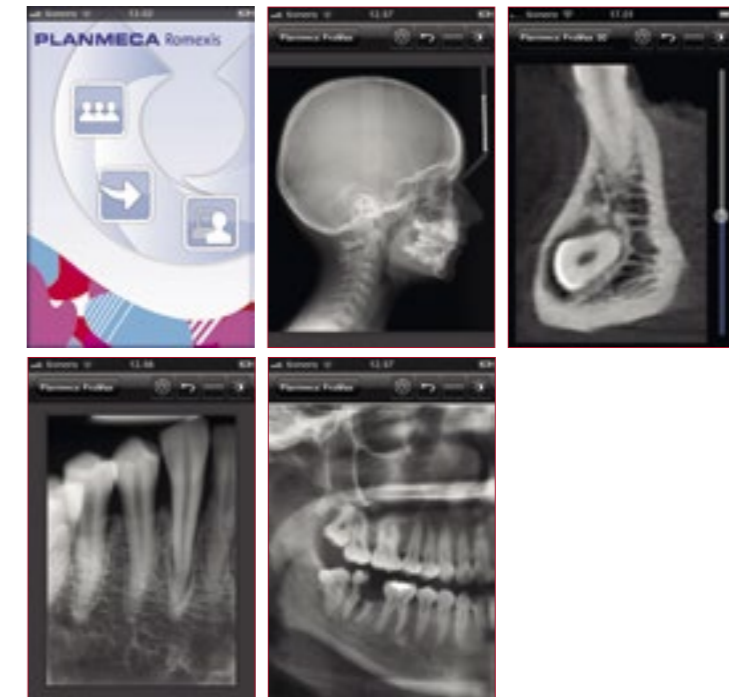
for iPhone and iPad

Stand out with colour

Complement the splendid design of your **Planmeca ProMax® 3D** X-ray unit by giving it a personal touch with your favourite colours. Select the perfect one from our exquisite and inspiring collection and create the look of your dreams!
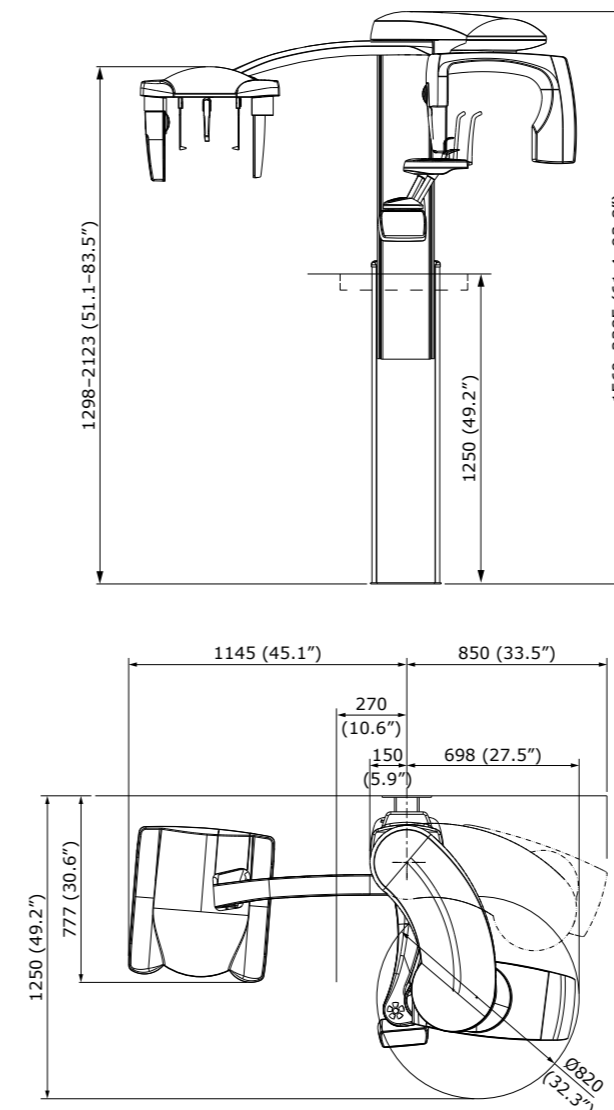
Pink

Sky

Lime

Steel

Technical specifications

Technical data

	Planmeca ProMax 3D s	Planmeca ProMax 3D Classic
Anode voltage	54–90 kV	54–90 kV
Anode current	1–16 mA	1–16 mA
Focal spot	0.5 mm, fixed anode	0.5 mm, fixed anode
Image detector	Flat panel	Flat panel
Image acquisition	Single 200 degree rotation	Single 200 degree rotation
Scan time	18 s, pulsed X-ray	18 s, pulsed X-ray
Reconstruction time	20 s	18–35 s
3D reconstruction server	Proprietary Feldkamp type back projection reconstruction algorithm	
	Improved Artefact Removal (IAR) for high contrast object compensation	

Dental programs
Volume size (child mode)

	Planmeca ProMax 3D s	Planmeca ProMax 3D Classic	Voxel size, isotropic
Tooth	Ø50 x 80 mm (Ø42 x 68 mm) Ø50 x 50 mm (Ø42 x 42 mm)	Ø40 x 80 mm (Ø34 x 68 mm) Ø40 x 50 mm (Ø34 x 42 mm)	100 µm, 150 µm, 200 µm, 400 µm
Teeth	triple scan: 90 x 60 x 80 mm	Ø80 x 80 mm (Ø68 x 68 mm) Ø80 x 50 mm (Ø68 x 42 mm) triple scan: 140 x 105 x 80 mm	150 µm, 200 µm, 400 µm

Dimensions

1298–2123 (51.1–83.5")
1250 (49.2")
1560–2385 (61.4–93.8")

1145 (45.1")
850 (33.5")
270 (10.6")
150 (5.9")
698 (27.5")
1250 (49.2")
777 (30.6")
Ø820 (32.3")

Physical space requirements

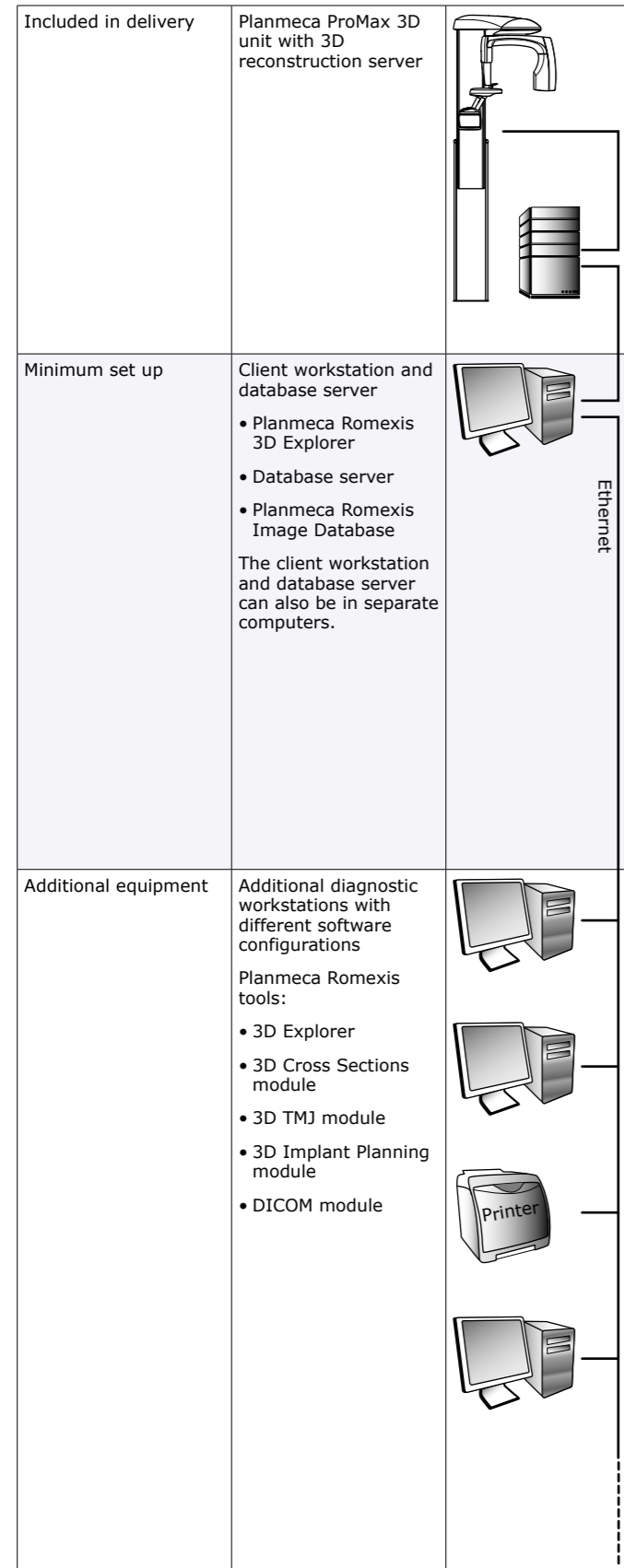|	Planmeca ProMax 3D Classic / 3D s	Planmeca ProMax 3D Classic / 3D s with cephalostat
Width	96 cm (38 in.)	194 cm (76 in.)
Depth	125 cm (49 in.)	125 cm (49 in.)
Height*	153–243 cm (60–96 in.)	153–243 cm (60–96 in.)
Weight	113 kg (lbs 248)	128 kg (lbs 282)

Minimum operational space requirements

	Planmeca ProMax 3D Classic / 3D s	Planmeca ProMax 3D Classic / 3D s with cephalostat
Width	150 cm (59 in.)	215 cm (85 in.)
Depth	163 cm (64 in.)	163 cm (64 in.)
Height*	243 cm (96 in.)	243 cm (96 in.)

*The maximum height of the unit can be adjusted for offices with limited ceiling space.

Technical specifications

Example installation

Included in delivery	Planmeca ProMax 3D unit with 3D reconstruction server
Minimum set up	Client workstation and database server • Planmeca Romexis 3D Explorer • Database server • Planmeca Romexis Image Database The client workstation and database server can also be in separate computers.
Additional equipment	Additional diagnostic workstations with different software configurations Planmeca Romexis tools: • 3D Explorer • 3D Cross Sections module • 3D TMJ module • 3D Implant Planning module • DICOM module

Planmeca Romexis® imaging software

Supported 2D modalities	Intraoral
	Panoramic
	Cephalometric
	2D linear tomography
	Photos
	Stack images (CBCT slices and panoramic slices)
Supported 3D modalities	3D CBCT
	3D photo
	3D surface scan
Supported photo sources	Intraoral camera
	Digital camera or scanner (import or TWAIN capture)
Operating systems	Win XP / Win Vista Pro/ Win 7/ Win 8
	Win 2003 Server /Win 2008 Server
	Mac OS X*
	For detailed information please see system requirements of Planmeca Romexis www.planmeca.com
	*Cephalometric Analysis module and 3D Ortho Studio module are not supported on Mac OS
Image formats	JPEG or TIFF (2D image)
	DICOM (2D and 3D image)
	STL (3D image)
	TIFF, JPEG, PNG, BMP (import/export)
Image size	2D X-ray image: 1–9 MB
	3D X-ray image: typically 50 MB–1 GB
Installation options	Client–Server
	Java Web Start deployment
DICOM 3.0 support	DICOM Import/Export
	DICOM DIR Media Storage
	DICOM Print SCU
	DICOM Storage SCU
	DICOM Worklist SCU
	DICOM Query/Retrieve
	DICOM Storage Commitment
	DICOM MPPS
Interfaces	TWAIN Client
	PMBridge (patient information and images)
	VDDS (patient information and images)
	InfoCarrier (patient information)
	Datagate (patient and user information)
3rd party software integrations	Dolphin Imaging
	Nobel Clinician
	Materialise Dental Simplant
	Straumann coDiagnostiX
	Cybermed N-Liten

Planmeca ProMax® 3D family

Discover also the other innovative products in our **Planmeca ProMax® 3D** family and find the perfect unit for your imaging needs.

Planmeca ProMax® 3D s   Planmeca ProMax® 3D Classic   Planmeca ProMax® 3D Plus   Planmeca ProMax® 3D Mid   Planmeca ProMax® 3D Max

Comparison

	Planmeca ProMax 3D s	Planmeca ProMax 3D Classic	Planmeca ProMax 3D Plus	Planmeca ProMax 3D Mid	Planmeca ProMax 3D Max
3D Dental programs	Yes	Yes	Yes	Yes	Yes
3D ENT programs	-	-	Yes	Yes	Yes
ProFace 3D face photo	Yes	Yes	Yes	Yes	Yes
3D Models scan	Yes	Yes	Yes	Yes	Yes
2D panoramic imaging	Yes	Yes	Yes	Yes	Yes
2D cephalometric imaging	Yes	Yes	Yes	Yes	-

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Available on the **App Store**

Learn more:
Planmeca Showroom
for iPad

True 2D and 3D imaging:
Planmeca iRomexis™
for iPhone and iPad

Planmeca Oy designs and manufactures a full line of high technology dental equipment, including dental care units, panoramic and intraoral X-ray units, and digital imaging products. Planmeca Oy, the parent company of the Finnish Planmeca Group, is strongly committed to R&D, and is the largest privately held company in the field.

PLANMECA

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