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## Hyperion X5

3D/2D Ceph suspended imaging system



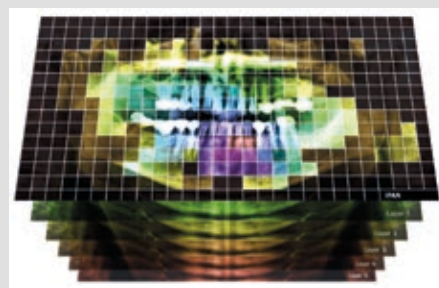
# Hyperion X5. Continuous innovation.

The smallest 3D/2D suspended system in the world evolves to integrate teleradiographic examinations as an extra option. Innovative design, flexibility and user-friendliness. Out of our experience comes the best solution for every dentist.

Hyperion X5 evolves to let the dentist choose a Ceph application, which can also be retrofitted. Quick and easy to use throughout the examination, this system ensures high resolution 3D and 2D images and low emission times plus fast data processing for real time diagnosis and improved patient communication. The new virtual console streamlines capturing procedures and introduces new protocols for volumetric examination of maxillary sinuses and orthogonal panoramic images. Thanks to the automatic servo-controlled movements of the 3D sensor block, short examination times ensure a consistently positive experience.

**A new opportunity for 3D/2D and Ceph.**

- Ceph-Ready
- iPAN (DoseSaver 80)
- Full 3D: dentition and maxillary sinuses
- Intuitive virtual console - Guided workflow
- Servo-controlled movements



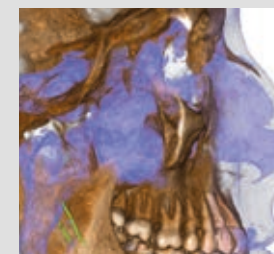
## iPAN (DoseSaver 80) & MRT

The PAN examination uses MRT (Morphology Recognition Technology) and the latest iPAN protocol to automatically generate a single high-quality panoramic image. Image resolution is optimized thanks to an algorithm that selects the best, sharpest focus.



## Cephalometric examination

The new Hyperion X5 teleradiographic system features programs for every diagnostic need. Ultra-high quality images, extremely short scan times and low irradiation doses: the very best cephalometric technology, all in the most compact unit the market has to offer.



## Cone Beam 3D in HD

3D images with ultra-fast scans at low doses and very high resolution (Voxel **80 µm**) over the complete dentition, combined with dedicated FOVs developed to obtain consistently excellent results. Complete dental diagnosis, including assessment of maxillary sinuses.



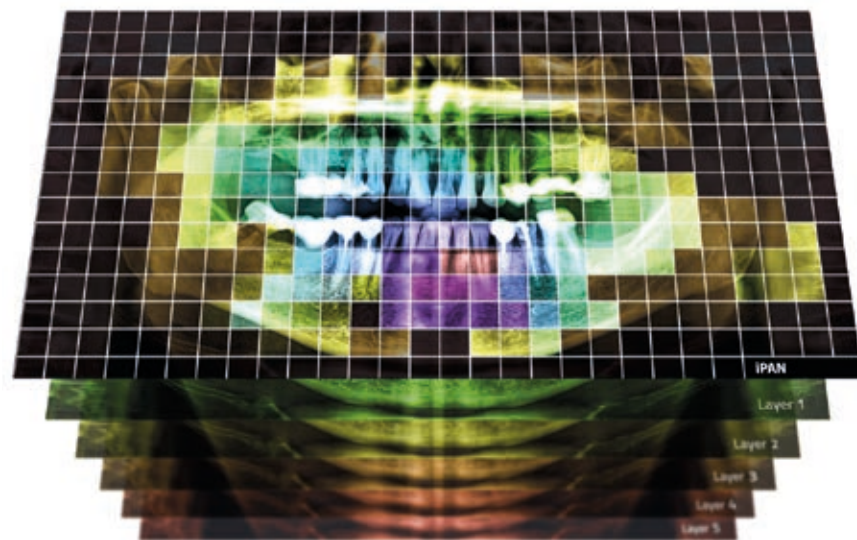
# iPAN. Lower doses, greater comfort.

Hyperion X5 takes performance to the next level by simplifying workflows, safeguarding patient health and delivering cutting-edge image quality.

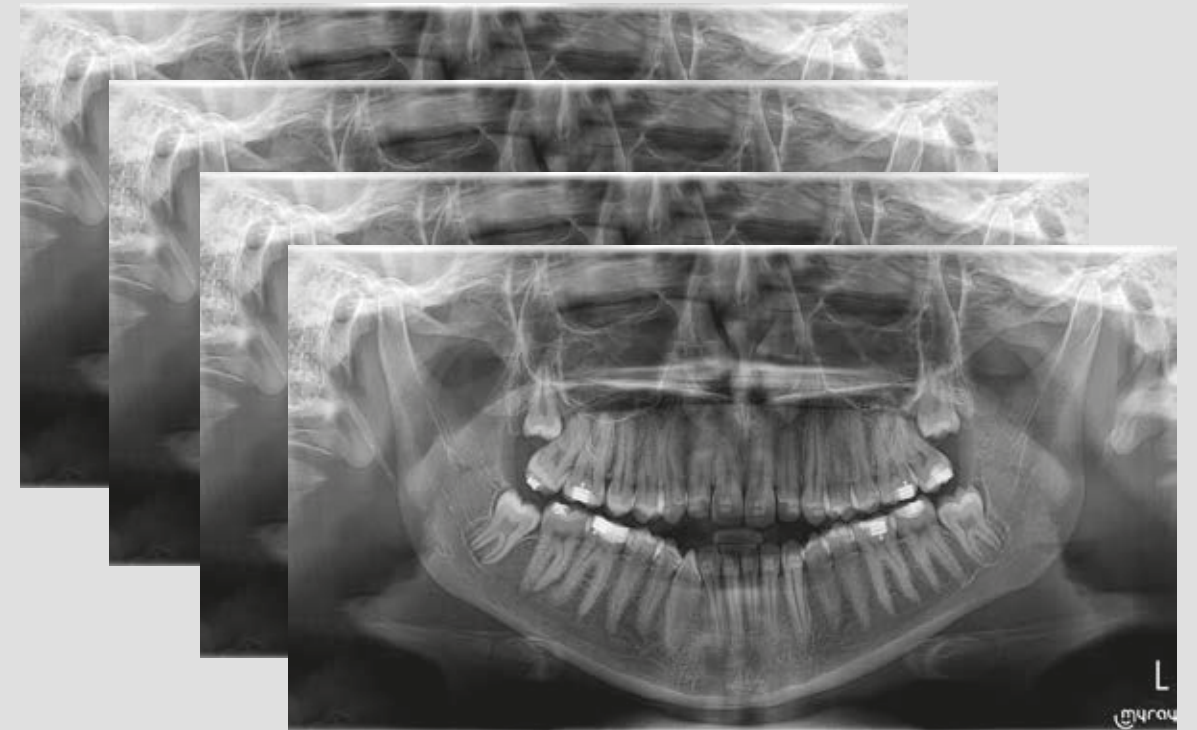
MyRay merges MRT technology with the new intelligent iPAN function - together with the DoseSaver 80 configuration - to provide a single image with a focus that's optimized according to the patient's specific morphology. All with an extremely low dose. The end result: a single panoramic image created automatically by the device, which selects the anatomical areas of each layer to be shown in the sharpest focus.

**Always in Focus.**

- Dose reduced by 20%
- Better contrast on dental structures
- Adaptable to patient's anatomy
- Quick and simple workflow
- Efficient communication



**MultiPAN (DoseSaver 100)**



**New iPAN (DoseSaver 80)**



# Designed to satisfy your every need.

Hyperion X5 is the cutting-edge imaging system that covers your every need. A compact, complete solution that boosts your surgery's diagnostic potential.

A complete family of dental imaging solutions for all dental surgeries.

Designed for surgeries that require three-dimensional diagnostic potential, the 3D/2D-configuration Hyperion X5 offers just the right solution and simultaneously provides excellent 2D performance.

The optional integration of the teleradiographic arm further boosts the diagnostic capacity.

**MyRay, Just right for you.**

- Compact&Light
- Capacità diagnostiche superiori
- Plug&Play
- Patient comfort
- Accessible technology



## Hyperion X5 2D PAN\*

Focus-Free digital panoramic system suitable for all users, equipped with MultiPAN function and orthogonal projection. Designed to ensure accessible, accurate 2D study of the complete dentition, maxillary sinuses and temporo-mandibular joints.

\*Not available for USA/Canada



## Hyperion X5 2D PAN "Ceph Ready"

Focus-Free MultiPAN 2D imaging system designed for all users, with variable collimator to limit exposure to the region of interest only. Designed to be upgradeable at any time with a teleradiographic arm.



## Hyperion X5 2D PAN CEPH

Full CEPH digital teleradiographic imaging system with Focus-Free orthogonal panoramic imaging suitable for all users. Designed to simplify dental diagnostics with real-time images, which can also be viewed on iPad.



## Hyperion X5 3D PAN "Ceph Ready"

3D Multi FOV imaging system with Focus-Free PAN designed for all users and factory-set for upgrading at any time with a teleradiographic application. Designed to simplify dental diagnostics with 3D and 2D images that can be viewed in real time.



## Hyperion X5 3D PAN CEPH

3D Multi FOV imaging system with Focus-Free PAN and Full CEPH accessible for all users, suitable for wall mounting. Designed to make complete dental diagnostics accessible in real time.



Light and compact like an intraoral X-ray unit, offering an extensive range of options. All you need is a wall.





3D TECHNOLOGY

# Diagnostic flexibility.

Flexible, efficient, fast. Hyperion X5 - designed to deliver the best results in minimum time with limited doses. It displays 2D and 3D images packed full of details to produce effective and safe diagnoses.

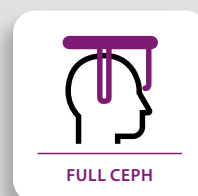
Hyperion X5 is a complete, user-friendly X-ray device, equipped with smart automatisms to help doctors to immediately obtain the desired results. The innovative 3D Cone Beam technology of Hyperion X5 generates a multitude of high definition data (80  $\mu$ m) in a single scan. MultiFOV adapts the field of view to patient builds and diagnostic requirements. Ultra-fast scans and short emission times ensure that patients receive low X-ray doses. Hyperion X5 offers a range of settings, such as the MultiPAN function which lets users choose the most suitable panoramic image for every detail of clinical interest.

**Versatile and patient-friendly.**

- MultiPAN system
- Extremely high definition 3D (80  $\mu$ m)
- Clever collimation
- Real-time diagnostics
- Secure & Safe



## FULL CEPH



The updated Hyperion X5 Ceph telerradiographic system features programs for every diagnostic need. Ultra-high quality images, extremely short scan times and low irradiation doses: the very best cephalometric technology, all in the most compact unit the market has to offer.

## MAXI FLEX



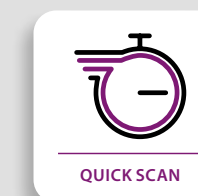
From 2D to 3D, all the diagnostic potential you need. From adults to children, in just a few simple steps. Adapts field of view and doses to actual diagnostic requirements. Intelligent MultiFOV collimation, from the entire dentition (10x10 cm) to just a small portion (6x6 cm). Users can select, according to diagnostic requirements, between HD (80  $\mu$ m) or low-dose QuickScan (160  $\mu$ m) protocols.

## MULTI VISION



Advanced 2D image processing system, equipped with a MultiPAN feature able to generate in a single scan, with the same exposure levels as in traditional panoramic imaging, 5 different focussing layers from which to select the most appropriate one for your diagnostic needs. Highly useful for analysing patients with complex anatomies and/or correcting post-capture patient positioning virtually.

## QUICK SCAN



Available for both 2D and 3D scans, QuickScan protocols minimise scan times and protect patient health by reducing X-ray doses.

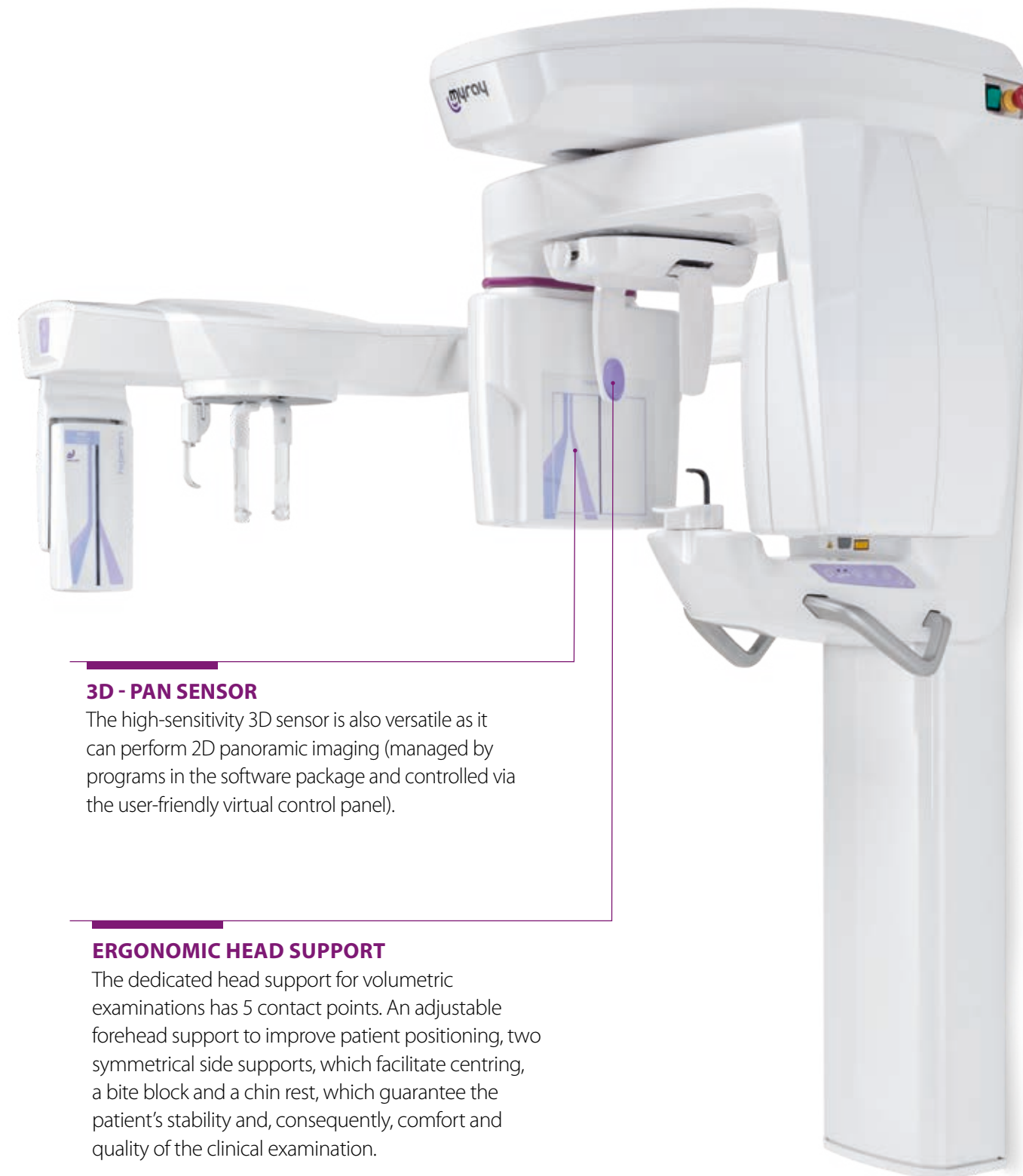
# All the potential of 3D.

Achieving the full potential of 3D examinations has never been easier or more effective. Thanks to dedicated mechanisms, patient positioning solutions and exclusive automatisms that help ensure a positive outcome at every examination, dentists can make the most of 3D potential.

Hyperion X5 has a powerful X-ray generator to maximise performance and minimise scan times. It also features a highly sensitive 3D-PAN sensor to produce images of exceptional quality with a minimal irradiated dose. Combined with optimised scan protocols, this latest-generation technology offers a resolution of up to 80 µm.

**3D made simple.**

- Automatic sensor and collimator alignment
- Ultra-high sensitivity 3D-PAN sensor
- Adjustable and ergonomic head support
- 3D MultiFOV, from 6x6 to 10x10 cm
- Fast, safe CB3D scan (only 6.4 s)



## 3D - PAN SENSOR

The high-sensitivity 3D sensor is also versatile as it can perform 2D panoramic imaging (managed by programs in the software package and controlled via the user-friendly virtual control panel).

## ERGONOMIC HEAD SUPPORT

The dedicated head support for volumetric examinations has 5 contact points. An adjustable forehead support to improve patient positioning, two symmetrical side supports, which facilitate centring, a bite block and a chin rest, which guarantee the patient's stability and, consequently, comfort and quality of the clinical examination.

## AUTOMATIC CEPH COLLIMATION

In the event of cephalometric examinations the turret containing the 3D sensor is automatically rotated and lowered, aligning the opening integrated in the structure so as to create suitable collimation for the examination. Moreover, the sensor is positioned so as to make more space available for the patient and ensuring a more comfortable experience.





# Expand the diagnostic field.

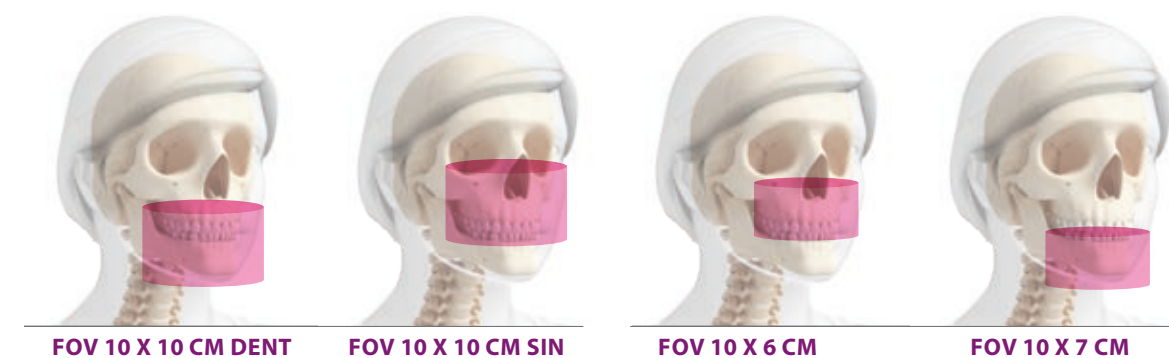
Capture every detail with 3D technology and expand your view into the third dimension. With 3D you can assess all points of diagnostic interest in their anatomic setting far more effectively than with traditional panoramic images. Ensure maximised practicality and working benefits with Hyperion X5.

A wide range of FOVs available for your clinical needs: from implantology to the measurement of maxillary sinus volumes, from endodontics to oral surgery. Each FOV is available in three versions to adapt to all clinical needs. It takes just a few simple steps to identify the most suitable set-up based on the anatomical region of interest. The innovative selection from three dedicated modes allows the examination to be carried out consistently with the actual diagnostic needs and in a highly user-friendly manner:

- QuickScan** Faster and ultra-low dose scans for post-surgery follow-up and macro-structure analysis.
- Standard mode** Primary diagnostics and treatment planning. The best balance between dosage and quality.
- SuperHD** Outstanding, uncompromising level of detail. Ideal for micro-structure analysis.
- Smart CB3D.**

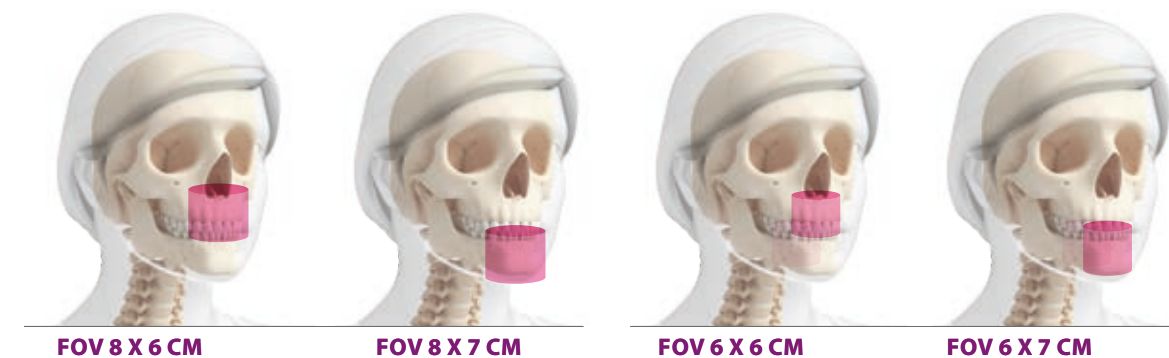
- 3D MultiFOV
- 3 optimised scanning protocols
- Implantology, Orthodontics, Endodontics
- Maxillary sinuses
- Templates, models, impressions

## Multiple FOVs



Broaden your vision, expand your diagnosis: in a single scan, Hyperion X5 can show you the entire dentition, including third molar roots or maxillary sinuses of adult patients, via ultra-fast (6.4 s) scans at ultra-low doses, or with very high resolution up to 80 µm.

Fields designed for lower arch imaging including third molars, and upper arch imaging including the maxillary sinus floor. Maximum amount of information in a single volume, for more complete case studies.



Reduced fields of view suitable for examining the upper or lower semi-arch in adult patients, or with limited doses for the examination of the complete dentition in children.

6 cm diameter to view sections along the dental arch. It only scans your area of interest: semi-arches or frontal areas, without cutting out the occlusal zone or the lower base of the upper jaw and minimising patient exposure.

### 3D

#### DENTAL EXAMINATIONS

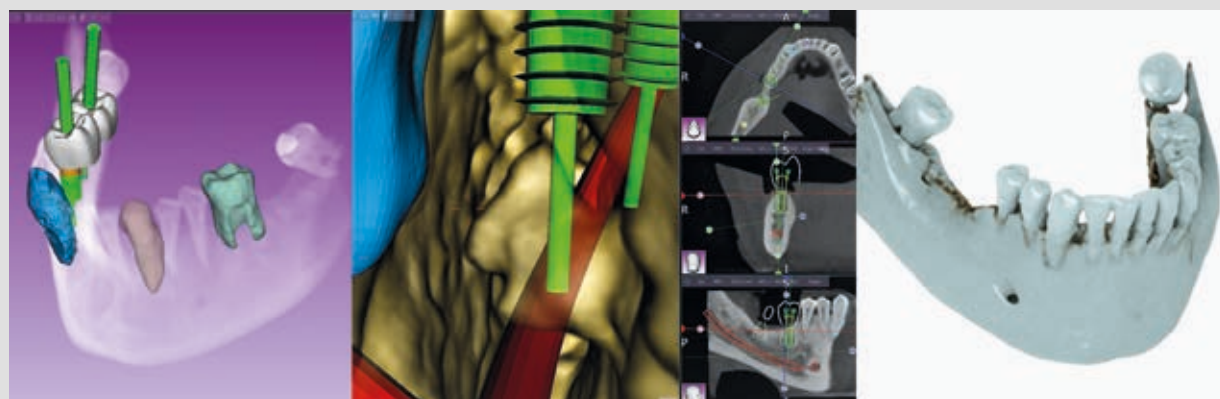
- Complete adult dentition 10 x 10 cm
- Single upper dental arch in adult patient. 10 x 6 cm
- Single lower dental arch in adult patient. 10 x 7 cm
- Complete child dentition: 8 x 7 cm
- Complete child dentition with maxillary sinuses: 8x 10 cm
- Adult upper semi-arch: 8 x 6 cm
- Adult lower semi-arch: 8 x 7 cm
- Child semi-arch or adult upper partial dentition: 6 x 6 cm
- Child semi-arch or adult lower partial dentition: 6 x 7 cm
- Maxillary Sinuses: 10 x 10 cm



# Complete, for every flow.

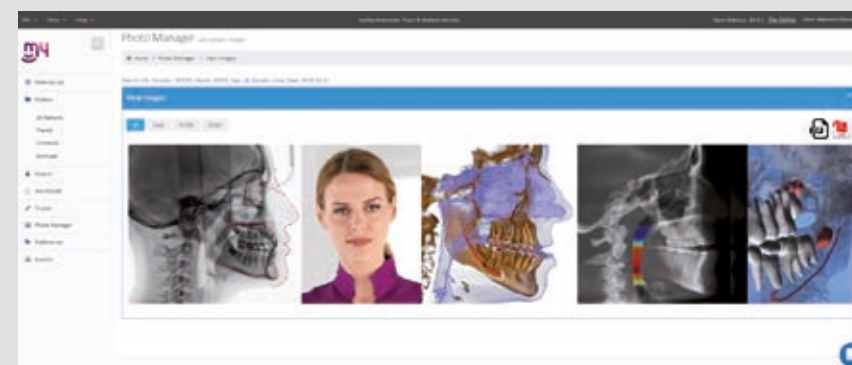
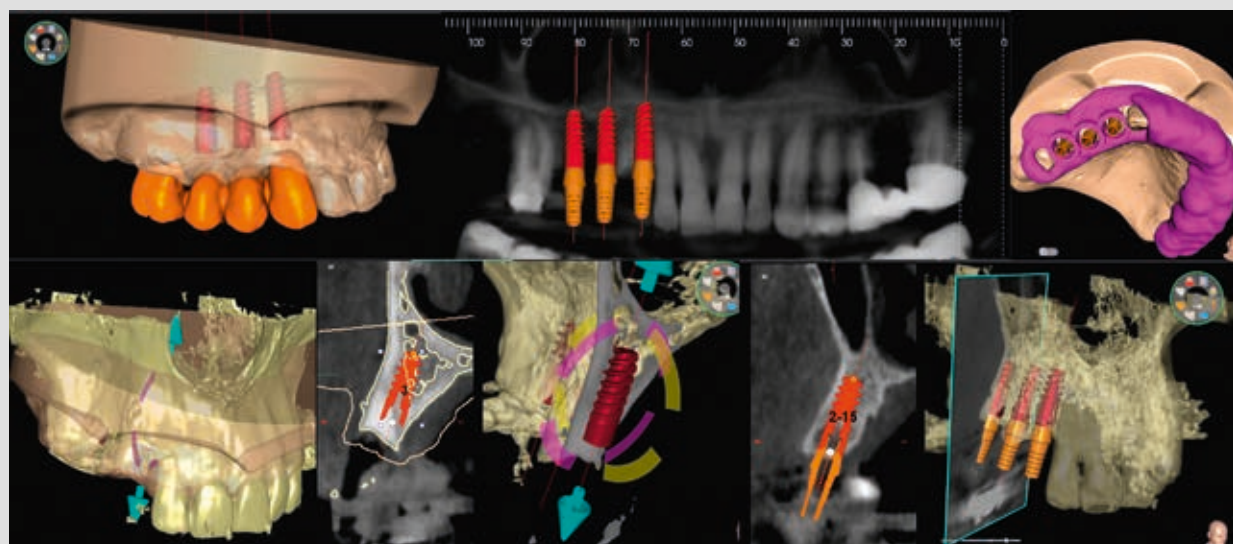
## Improving workflow with the CLOUD-based multi-platform software.

Compatible with PC, MAC, iPad and iPhone, RealGUIDE allows for implant planning based on the many implant libraries constantly updated on the CLOUD platform. The MyRay RealGUIDE platform manages implant rehabilitation steps, streamlining CLOUD-based data sharing and providing all the essential elements for surgical template production. In this way, dentists, technicians, implantologists and patients all benefit from fast, precise and shared workflow, with a positive impact on successful treatment outcome. Designed for the creation of surgical templates, it offers a number of features, available according to the chosen version, like the import and overlay on bone data of STL, or PLY (colour) files of digital impressions and/or prosthetic designs scanned by optical scanner; segmentation of volumetric data of anatomical parts (upper and lower jaws, teeth) with **Artificial Intelligence algorithms, exportable to STL**; virtual endoscopy; RealBODY photorealistic rendering.



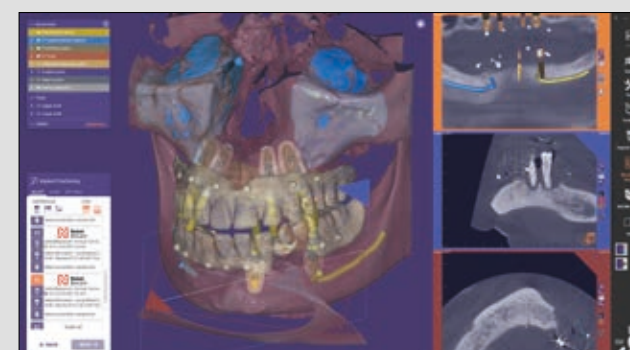
## Advanced implant planning.

The implant is placed directly on the 3D model and combined with STL data from intraoral scanners to define the final prosthetic project. With advanced implant design tools you can work safely, thanks to accurate information on the available amount of bone and distance from the surrounding anatomical structures, such as the mandibular canal, defining a minimum safety distance.



iRYS software allows for the immediate sharing of 2D or 3D images on the **CephX\*** cloud server. It also gives access to A.I. services such as automatic cephalometric tracing, segmentation of the anatomical areas of the volume, or airways analysis.

\* This is an independent software product. Check with the local distributor to see whether this function is legally approved and available in your country.



## exoplan®

The integration of exoplan lets you merge all your practice's digital images on one simple cutting-edge software platform. Face scans, optical impressions, 3D X-rays and implant planning are integrated in a user-friendly, guided, workflow that helps dentists with implant planning and surgical guide design. To allow optimised use of exoplan, exocad provides a market-leading range of over 780 libraries: undated daily, these contain more than 13,000 validated implants and more than 3,300 surgical components.

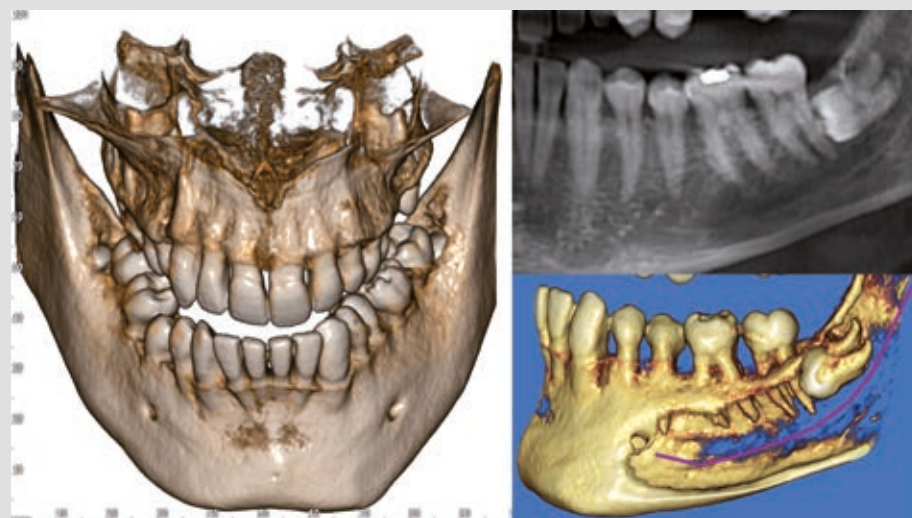


## exocad Smile Creator®

Thanks to the integrated exocad Chairside module you can combine the acquired optical impressions with patient photos or face scans, creating in-CAD smile designs that lead to predictable makeover results. Gain greater control over outcomes and improve communication with your patients and partners. You'll be able to assess the aesthetic relationships between teeth, smile and face, providing dental technicians with a realistic perspective for restorative treatment plans. Guided workflows and comprehensive functionality make Smile Creator a user-friendly intuitive yet powerful digital planning solution for cosmetic dentistry.



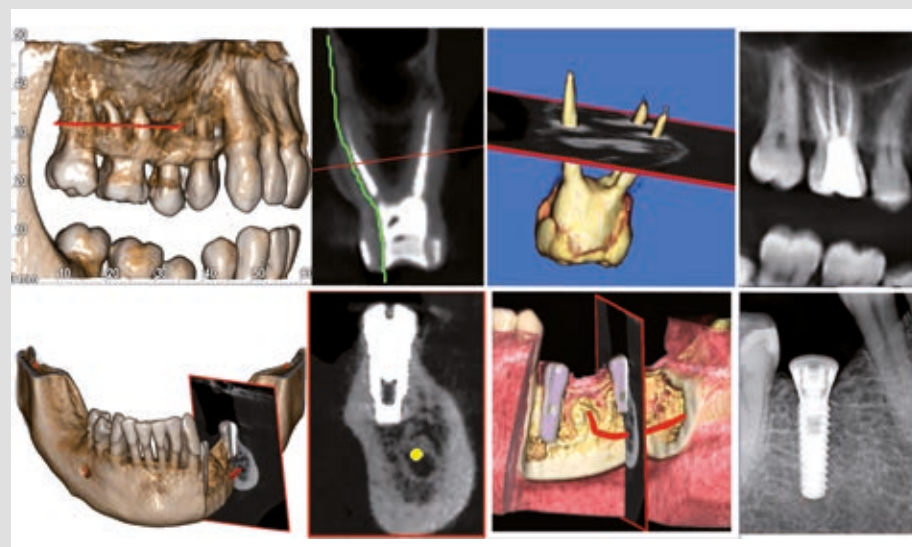
## Exploring the third dimension.



### COMPLETE (ADULT) DENTITION

Highly accurate scanning of both dental arches (including third molar roots) and surrounding anatomic features, useful for correct diagnosing and improved treatment planning. Unlike 2D, 3D allows for actual positioning identification.

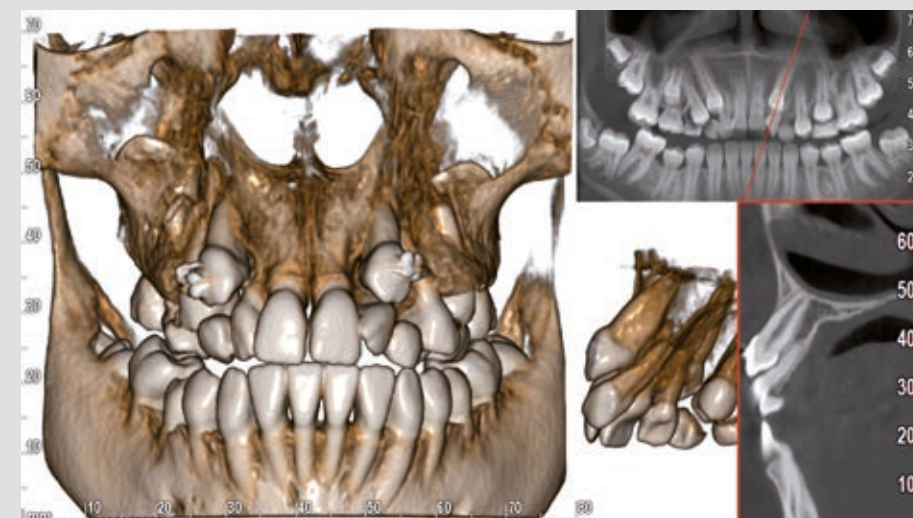
- FOV 10 x 10cm with detailing up to 80  $\mu$ m



### LOCAL (LOW DOSE) ANALYSIS

Detailed diagnostics within the region of interest only, far more in-depth than 2D examinations, for HD endodontic assessments; study of relationships between impacted teeth; post-op checks with fast scanning and doses equivalent to those of a 2D examination.

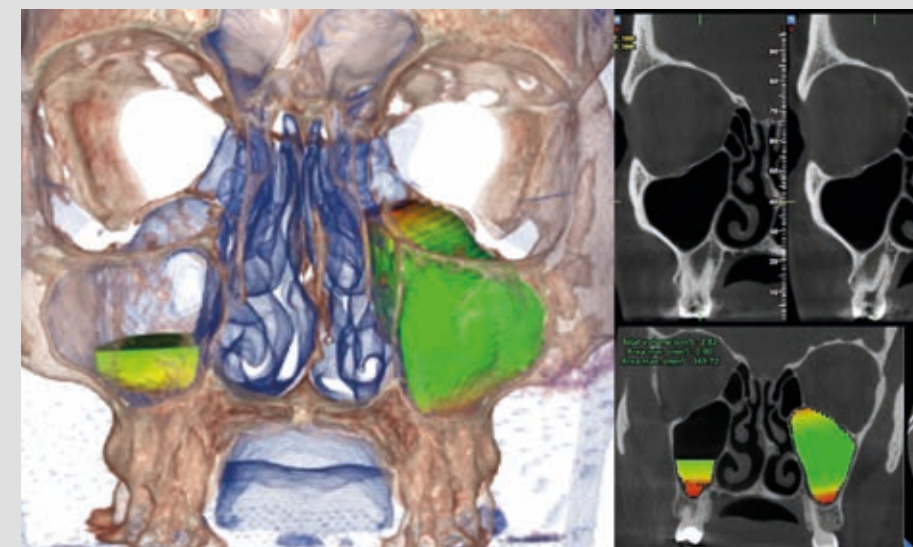
- MultiFOV – HD and QuickScan



### COMPLETE (CHILD) DENTITION

Complete, low-dose volumetric examination of the dentition and maxillary sinuses of children. The reduced collimation avoids exposure of sensitive organs while ensuring complete and thorough investigation.

- Limited exposure – Low Dose



### MAXILLARY SINUSES

The 10 x 10 cm FOV acquires in a single scan the maxillary sinus image useful for a volumetric assessment of structures and hollows. This allows any disease to be carefully diagnosed for optimised treatment planning, including sinus lifting, and volumetric analysis enabling to trace lines on a virtual patient model, evaluating morphological ratios on 3D renderings.

- Volumetric analysis – Low Dose

# Comfort and excellent prospective imaging.

Performance combines with comfort. Its ceph arm is extremely compact and the latest generation repositionable PAN/CEPH sensor guarantees ideal performance in every application.

Easily repositionable in the presence of a teleradiographic arm, with retrofitting options available; the 2D sensor can be used for both panoramic imaging and CEPH examinations. High orthogonality panoramic viewing allows for minimised overlapping of adjacent dental elements: the structures to be examined are shown as clear, distinct items. The 4 contact points head support ensures patient stability and comfort during scanning. An on board drawer is available on the machine for the patient to store personal items during the examination.

**Ready for CEPH.**

- CEPH-Ready
- High orthogonality PAN
- Repositionable PAN/CEPH sensor
- Comfortable 2D head support
- Fold-away accessory drawer





# The best of both dimensions.

Hyperion X5 offers a wide selection of 2D programs for panoramic and cephalometric quality images, full of details useful to deliver an effective and safe diagnosis while protecting the patient's health.

The dedicated CMOS sensor (latest generation Csl) generates sharp and homogeneous 2D images; thanks to its wide selection of acquisition programs, Hyperion X5 is a must-have and user-friendly diagnostic tool. The wide focusing layer allows for detailed imaging throughout the dental arch. In addition to standard panoramic imaging, dentition orthogonal projections and bitewing exposure focussing on dental crowns can also be obtained. Temporo-mandibular joint examinations are possible as both postero-anterior projections and latero-lateral projections. Extensive and accurate scanning also including the maxillary sinuses allow upper airways examination. To minimise the irradiated dose, the scanning area can be limited to the region of interest or the QuickPAN feature can be used for quicker and more comfortable examinations. Select the examination that best reflects actual diagnostic requirements by selecting an ultra-fast or high quality scan.

**Broad choice of 2D exams.**

- Orthogonal projections
- Quick scanning
- Variable collimation
- Software programs for adults and children
- Servo-assisted positioning (laser guides)



## PAN

### PANORAMIC IMAGING and DENTITION

- Panoramic viewing and QuickPAN
- Reduced panoramic imaging for children
- Orthogonal panoramic views showing the entire dentition (reduces crown overlap)
- Hemi-panoramic and sectional dentition, with dedicated optimised projections
- 4-segments Bitewing exposures limited to crowns, to detect inter-proximal caries

## TMJ

### TMJ EXAMINATIONS (OPEN OR CLOSED MOUTH)

- Latero-lateral projection of both TMJs
- Postero-anterior projection of both TMJs
- Lateral and postero-anterior projections of both TMJs

## SIN

### MAXILLARY SINUS EXAMINATIONS

- Front or side view (left and right) of the maxillary sinuses



2D 3D TECHNOLOGY

# Simply CEPH.

Designed to integrate the 2D sensor-equipped arm to perform cephalometric examinations, Hyperion X5 is the most versatile system on the market, offering a wide range of imaging options covering every possible clinical need.

The modular Hyperion X5 platform allows teleradiography module retrofitting at any time. The arm is extremely compact and the latest-generation sensor ensures optimal performance. Aided by programmed automatisms, the sensor aligns perfectly to speed up the cephalometric examination. Users can select the examination that best suits their actual diagnostic requirements by selecting an ultra-fast or high quality scan.

**Ready for every requirement.**

- Minimal bulk
- Ultra-fast scan
- TOP CEPH examinations
- Optimised alignment
- Operating comfort



## CEPH

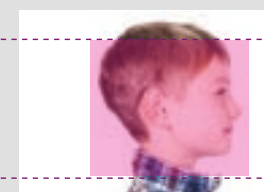
### TELERRADIOGRAPHIC EXAMINATIONS

- Latero-lateral projections with selectable scan length
- Pediatric latero-lateral projection, short scan and limited dose
- FULL CEPH projections, with reduced thyroid exposure and inclusion of the skullcap in children
- Antero-Posterior or Postero-Anterior projections
- Submentovertex projection, including Waters and reverse Towne positions
- Carpus projection



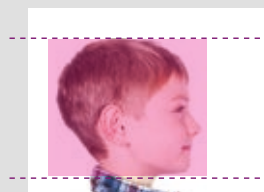
### TOP CEPH

Hyperion X5 adapts perfectly to the different examination requirements of adults and children. More specifically, TOP CEPH positioning for children reduces thyroid exposure and prevents sensor-shoulder contact, allowing inclusion, when possible, of the skullcap.



#### • STANDARD positioning

Conventional rods are used

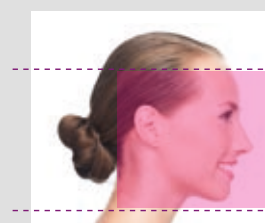


#### • TOP CEPH positioning

Long rods are used

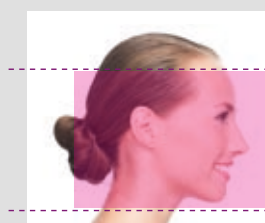
### CLEVER COLLIMATION

The exact X-ray exposure area can be selected with reduced scanning. The secondary teleradiographic image collimator is integrated in the rotary module, providing both outstanding compactness and easy access.



#### • Reduced scan 21cm

72% of irradiated area



#### • Complete scan 29 cm

100% of irradiated area



## Wide range of available 2D examinations



### ADULT PANORAMIC IMAGING

Panoramic exposure programs calibrated on patient build to adapt X-ray doses accordingly. Users can select the area of diagnostic interest for complete or partial analysis.

- QuickPAN or standard exposure
- Complete or partial analysis



### ORTHOGONAL PANORAMIC IMAGING

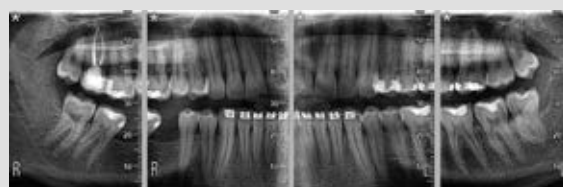
Minimises overlapping of adjacent tooth elements for improved periodontal examinations.



### CHILD PANORAMIC IMAGING

Limited exposure and optimised parameters for quick paediatric examinations. Users can select the area of diagnostic interest for complete or partial analysis.

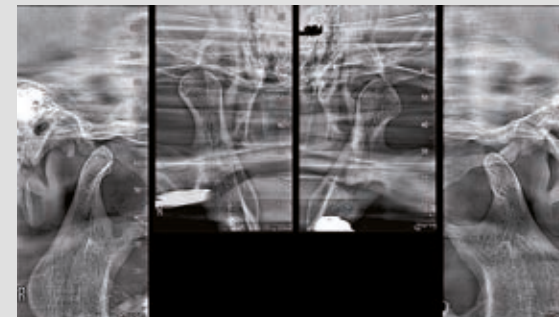
- QuickPAN or standard exposure
- Complete or partial analysis



### DENTITION AND BITEWING

Study of dentition with optimised interproximal projection for improved periodontal control. Collimation on the crowns for patients unable to tolerate intraoral bitewings: more comfortable and less intrusive.

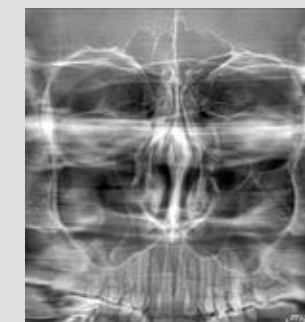
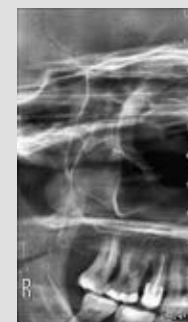
- Increased orthogonality
- Adapted collimation



### TEMPOROMANDIBULAR JOINTS

Simpler assessment of the temporomandibular situation thanks to latero-lateral or antero-posterior images, 4 radiographs in a single scan.

- Mouth open or closed
- Sagittal and Coronal



### MAXILLARY SINUSES

Characterised by a special image layer to produce radiographs in which the maxillary sinuses are clearly visible.

- Frontal
- Lateral

## CEPH. Case studies.



### TELERRADIOGRAPHY

**Latero-Lateral:** with highlighted soft tissue and bone details, critically important for cephalometric studies.

**Anterior-Posterior:** to detect asymmetries and malocclusions and be able to identify the right treatment.

**Carpal bones:** for residual growth potential assessment, possible with dedicated support.

MyRay CephX, cloud service for automatic cephalometric traces with A.I. (Artificial Intelligence).



# Efficiency means effectiveness.

When the workflow is optimised for every circumstance, effectiveness is a natural consequence. Hyperion X5 adapts to your needs and lets you focus on what's really important: the diagnosis.

Thanks to its advanced tools and features, Hyperion X5 improves every stage of imaging diagnostics, from positioning and examination selection to parameter settings, often entirely automatic. The interface provides guidance for the user throughout the examination set-up and acquisition phase. Equipment control and 2D image displaying can be managed from the virtual console on a PC or via iPad\*. The exclusive MRT technology allows clear images to be obtained without having to manually set the exposure parameters, automatically adapting them to the patient's anatomical characteristics. Thanks to MultiPAN acquisition and the 2D Focus-Free feature, the device automatically delivers optimised focussing, depending on dental arch morphology. For volumetric examinations, the operator can rely on 3D assisted centring with Scout View and for all 3D, 2D PAN and CEPH examinations, correct and stable positioning is made easier by laser guides.

**Efficient and effective.**

- Stable positioning, made easier by the use of 3 laser guides (Focus Free PAN)
- MRT (Morphology Recognition Technology)
- Assisted 3D alignment with Scout View
- Remote Control - Virtual control panel
- Advanced image filters (PiE - 3D SMART)



## CONTROL VIA iPad\*

Hyperion X5 has a user-friendly graphical interface, also available in the iPad\* application. It promotes intuitive control: in a few simple steps you can choose and set up the most appropriate examination based on clinical and anatomical interest.

\* must not be used for primary diagnosis.



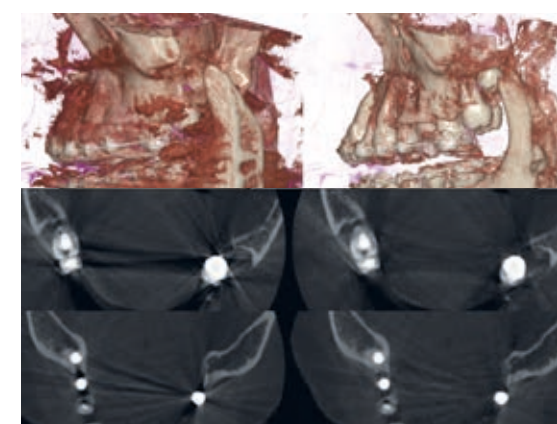
## PC INTERFACE

The multi-platform console allows simple and immediate access to all the device's features. The interface guides you step by step through every stage, from examination selection to set-up, with guided positioning of the FOV: for easier, faster and more effective scanning.



## 2D PiE

Advanced 2D PiE (Panoramic image Enhancer) filters maximise all 2D image rendering. They automatically and selectively optimise the display of the different anatomical regions, making each detail sharper in all captured views - from multiple panoramic imaging to dentition.



## 3D SMART

The 3D SMART (Streak Metal Artifacts Reduction Technology) feature allows metal-induced artifacts to be reduced in 3D volumes with a fully automatic procedure. Make your volumetric images always usable, even in the presence of amalgam restorations and implants.



# Caring for well-being.

Hyperion X5 simplifies your work and promotes the well-being of your patients. Quick scans, ultra-low dose irradiation, procedures that contribute to creating a peaceful and collaborative environment. Easy for you, comfortable for your patient.

Fast scans, low dose irradiation protocols and ergonomic positioning: the best ingredients for your patient's comfort and health.

Hyperion X5 always ensures acquisition procedures that guarantee maximum accessibility and minimised time inside the equipment - making it ideal for paediatric use or for patients with motor impairments. Each phase of the treatment can be shared with the patient in a clear, user-friendly way: this ensures greater patient involvement and their best collaborative attitude and trust in the acceptance of the proposed treatment.

**Share and care.**

- Ergonomic positioning
- Fast scan
- Low dose
- Quick sharing
- Easy access (also for patients in wheelchairs)

## ULTRA LOW DOSE QUICK SCANNING

The advanced QuickScan protocols, available for both 2D and 3D examinations, allow acceptable images to be obtained at lower doses compared to standard image acquisition. They are the ideal tool for post-operative monitoring and the identification of any macro-structures (such as impacted teeth and agenesis).

3D

QUICKSCAN  
6,4s

2D

QUICKPAN 6,8s  
QUICKCEPH 3,7s



## EFFECTIVE GUIDED POSITIONING

Positioning is fast and accurate thanks to an alignment system that projects 3 laser beams directly on to the patient's face, and the ergonomic head support unit equipped with 4/5 contact points ensuring the highest stability during scanning. The large mirror helps positioning while allowing maximum freedom of movement. The patient will always feel at ease.



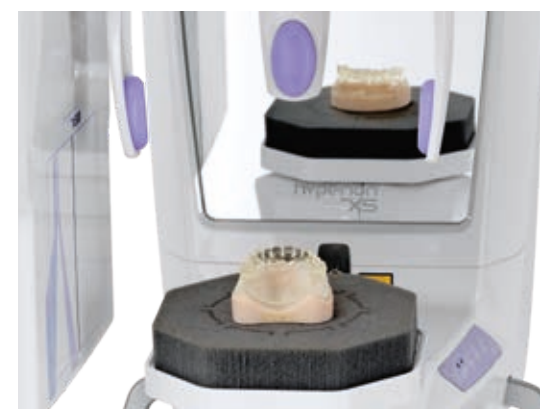
## PATIENT COMFORT

During the performance of a CEPH examination, the patient (adult or child) can benefit from a number of procedure-facilitating conditions. The dedicated head support unit is equipped with a height-adjustable forehead support and with side rods available in two sizes - standard for adults and long for children. Soft silicone ear protectors make the patient's experience even more comfortable.



## SERVO-CONTROLLED SYSTEM

The Scout View system allows the volume to be centred on the area of interest, keeping the patient in the same comfortable position. From the PC, the operator can see two (sagittal and frontal) views at ultra-low dose irradiation and fine-tune the scanning area, allowing the equipment to reposition itself correctly with very precise servo-assisted movements. This procedure avoids having to repeat the examination.



## MODEL SCANNING

Hyperion X5 has a dedicated protocol for scanning prostheses, radiological templates, models and impressions. The operator can position 3D objects on the provided support for quick scanning.

# iRYS, simple and versatile diagnoses.

The all-in-one software designed for simple and effective management of 2D and 3D images, with advanced tools and filters for diagnostics and planning.

Equipped with a whole ecosystem of features to view and process data captured during examinations, iRYS makes the diagnostic process easier and helps share images directly from a dedicated workstation to the dental surgery computers and the iRYS Viewer application available for iPad\*. With just one click you can send 2D images and 3D volumes to dental practice management software or to advanced design systems (guided implantology, cephalometric tracking, etc.). You will also be able to share examinations with the patients, after providing them with the viewer software (Viewer) directly on CD, DVD or a USB stick.

**iRYS is all you need.**

- Multi-desktop 2D/3D
- Simplified implant libraries
- Bone quality assessment
- Airway volume analysis
- iRYS Viewer dynamic reporting (APP for iPad\*)



**iRYS Viewer**

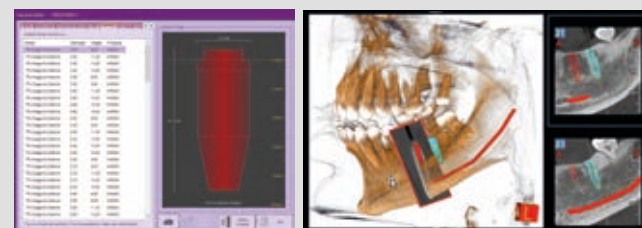
Available on the  
**App Store**

\* must not be used for primary diagnosis.



## IMPLANT SIMULATION

Best planning of surgical procedures, post-operative course and recovery times with the advanced iRYS feature that provide information on the anatomical structures surrounding the implant site. This feature can be viewed by simply positioning the preferred implants - selected from those available in the software extensive library. You can also modify the options or add new ones in a few simple steps.



## MANAGEMENT OF YOUR PATIENTS' 3D/2D SCANS

One software to handle and process 2D and 3D images. The Multi-Desktop system allows quick browsing between the various 2D to 3D views, with realistic rendering and multiplanar analysis. Everything you need to carry out high quality diagnoses and communicate quickly with the patient.





# A platform suitable for sharing.

The images acquired and processed with iRYS are compatible with the surgery management software or other processing and storage software. iRYS is DATA PROTECTION certified and IHE compliant with DICOM networks.

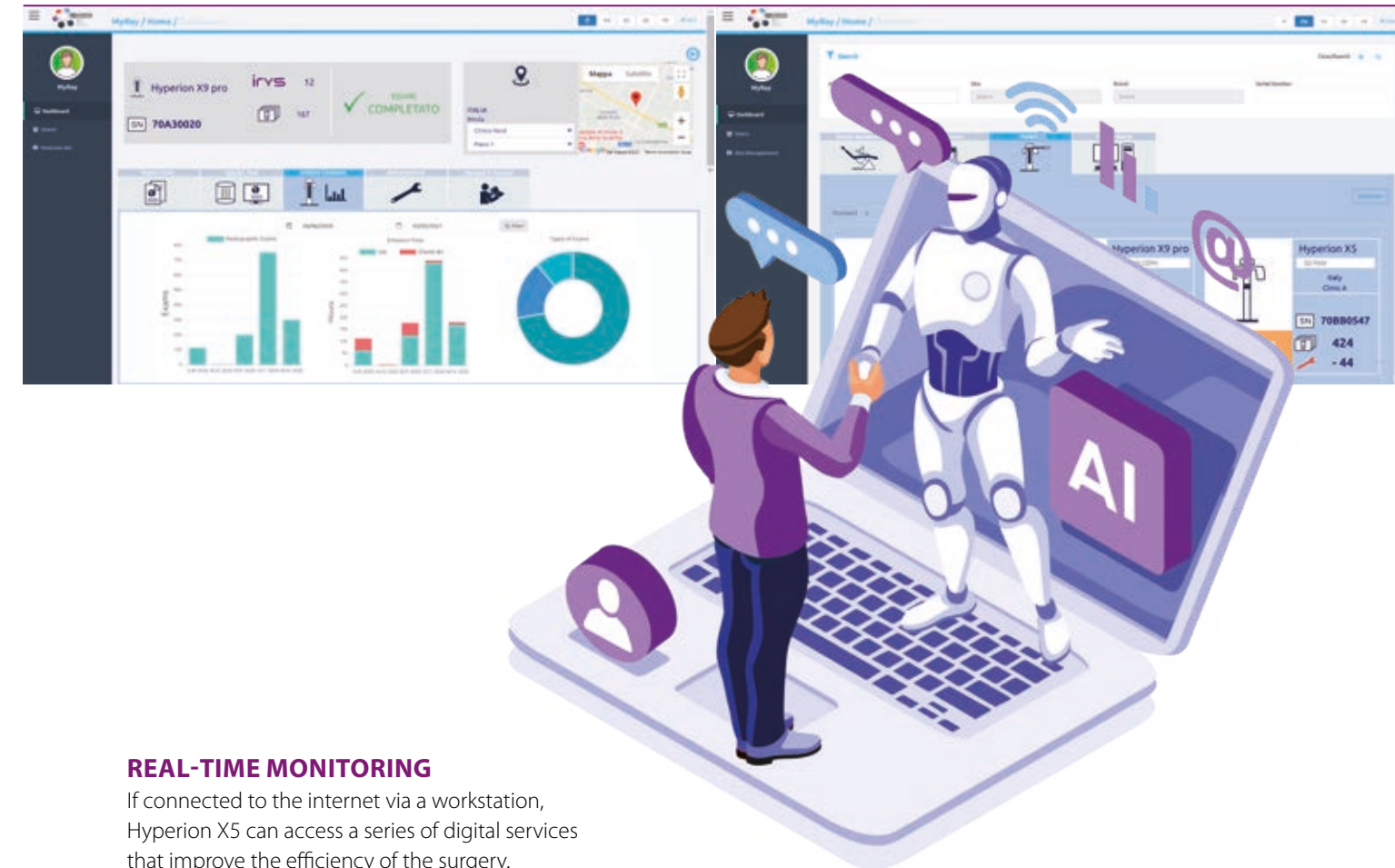
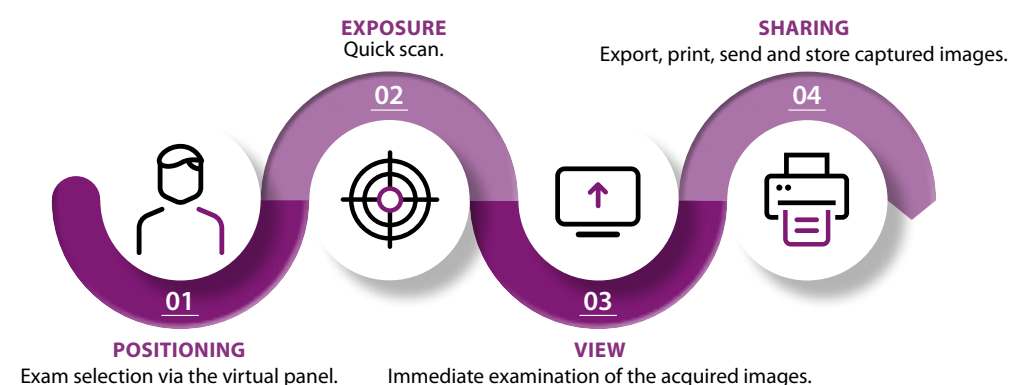
Hyperion X5 offers an innovative, efficient and reliable work experience. A universe of opportunities for your diagnostic requirements and for sharing examination outcomes. The machine perfectly interfaces with advanced patient management and storage systems, thanks to certified DICOM 3.0 standard compatibility. It also allows for remote technical assistance via an Internet connection, for maintenance, troubleshooting or updates, minimising downtime and enhancing efficiency and operational effectiveness.

**Share better.**

- Ethernet connection
- 1:1 print with report
- CD/DVD with 2D/3D viewer
- DICOM 3.0, TWAIN and VDDS support
- STL interface for CAD (NIP/RealGUIDE)



in according to EN ISO/IEC 17065:2012



## REAL-TIME MONITORING

If connected to the internet via a workstation, Hyperion X5 can access a series of digital services that improve the efficiency of the surgery.

**Easy Check** lets technical assistance staff monitor the device remotely to obtain real-time information that can be used to diagnose or resolve any issues.

Moreover, **Di.V.A.**, the digital virtual assistant, lets surgery administrators monitor equipment utilisation to gather data and statistics on use. The operating status of all MyRay extra-oral imaging equipment is therefore systematically monitored and geo-located. These services constitute a valuable tool for managing workloads and planning maintenance.



**EASY WORK**



**FULL CONNECTIVITY**



**PLUG&PLAY**



**REMOTE ASSISTANCE**

Improves clinical service quality, offering an immediate response to the problem via uninterrupted monitoring of the patient's condition during treatment. Smoother work flow, more relaxed patients.

Connection to DICOM networks is ensured thanks to protocols available with iRYS that allow printing, storage, image retrieval and interfacing with booking lists.

Applications available for iPad to provide Wi-Fi remote control and fast diagnostics. Settings, start and image capture - all at your fingertips.

Software upgrades, problem solving and device diagnosis. Remote maintenance allows for fast troubleshooting without interrupting work flows.

# Technical characteristics.

IMAGES	2D	3D
Type	Complete or partial adult and child panoramic imaging*, Orthogonal Panoramic imaging, QuickPAN, MultiPAN, Dentition, Bitewing* Frontal and Lateral (right and left) maxillary sinuses, Temporomandibular Joint (2 x Lateral + 2 x Frontal) open and closed mouth. Teleradiography: Skull AP-PA, LL Short/Long, Standard/Quick; Carpal teleradiography.	Complete examination of the 2 arches in a single scan for adults and children (reduced collimation); Examinations of the maxillary region with maxillary sinuses*; Examination localised in the region of interest.
(Maximum) theoretical resolution on the patient plane	2D: 5 - 6.9 lp/mm (Pixel 100-73 µm) CEPH: 5.6 lp/mm (Pixel 89 µm)	6.3 lp/mm (Voxel 80 µm)
Equivalent radiograph size (cm)	PAN: 26.2 (length) x 14.4 (height) CEPH: 29.2 (length) x 22 (height)	-
Fields of view on patient (cm)	PAN: 21 (length) x 11.5 (height) CEPH: 25.8 (length) x 19.4 (height) PAN Child: 18 (length) x 10 (height) Dentition: 14 (length) x 10 (height) Bitewing: 16.7 (length) x 7 (height)	DENT and SIN*: 10 (diameter) x 10 (height) 10 (diameter) x 7 (height); 10 (diameter) x 6 (height); 8 (diameter) x 7 (height); 8 (diameter) x 6 (height); 8 (diameter) x 10 (height); 6 (diameter) x 7 (height); 6 (diameter) x 6 (height);
Maximum image data size	PAN: 7.5 MB (single image) CEPH: 14 MB	720 MB
Magnification	PAN: 1.2 - 1.3 CEPH: 1.13	1 a 1 (isotropic voxel)
Scan time	<b>PAN:</b> 13.7 s (ORTHO); 12.2 s (STD); 6.8 s (Quick Scan) <b>CEPH:</b> 9.9 s (STD); 3.7s (Quick Scan)	<b>Super HD:</b> 16.8 s (Best Quality) <b>Standard:</b> 9.6 s (Regular) <b>Quick Scan:</b> 6.4 s (Low Dose)
Estimate of typical effective dose (ICRP 103)	PAN: 5 - 9 µSv	FOV: 10x10   35 µSv (Voxel 160 µm) - 121 µSv (Voxel 80 µm) FOV: 6x6   9 µSv (Voxel 160 µm) - 40 µSv (Voxel 80 µm)
Minimum image display times	RealTime	15 s
Advanced filters	<b>PIE</b> (Picture image Enhancer) <b>PAN Focus-Free</b>	<b>SMART</b> (Streak Metal Artifact Reduction Technology)

\*Optional vertical collimation on 2D PAN version (included in the base version 2D "Ceph Ready" and 3D)  
\*\*3D FOVs 10x10, 10x7, 10x6, 8x10 could be disabled for dento-alveolar applications according to canadian requirements

INSTALLATION VERSION	"AIR" WALL MOUNTED	"STANDARD" FLOOR MOUNTED COLUMN VERSION
Minimum space requirement (L x D)	CEPH Ready version: 872 mm x 983 mm CEPH version: 1785 mm x 983 mm	CEPH Ready version: 872 mm x 1030 mm. CEPH version: 1785 mm x 1030 mm
Package dimensions (L) x (D) x (H) in mm	Box1: 930 x 690 x 960 (Base machine) Box2: 1460 x 350 x 350 (Wall-mounted support) Box3: 575 x 1275 x 380 (Teleradiographic arm)	Box1: 930 x 690 x 960 (Base machine) Box2: 1860 x 355 x 350 (floor-mounted) Box3: 575 x 1275 x 380 (Teleradiographic arm)
Weight	2D version: 78 kg (172 lb) 3D/2D version: 90 Kg (198 lb) CEPH option: 21 kg (46 lb)	2D version: 87 kg (192 lb) 3D/2D version: 99 Kg (218 lb) CEPH option: 21 kg (46 lb)
Accessories	Wall counter-plate	Extra Wall Bracket (avoids floor drilling) Self-supporting PAN or PAN-CEPH base (wall mounting required)

ERGONOMICS	
Examination selection	Procedure guided from virtual control panel on PC and/or iPad
Patient positioning	Suggestion from virtual control panel - Servo-assisted alignment, 3 laser guides (Class 1 - IEC 60825-1) - 3D Scout View
Patient positioning	Efficient 4 contact point 2D version - 5 contact point version, 3D/2D right/left adjustable
Adjustments	2-speed height adjustment drive Keypad on the machine and/or iPad app Servo-assisted alignment: Keypad on the machine or remotely controlled (via Scout View)
Other functions	Multilingual, parking position, remote control
Notes	Easy access for patients in wheelchairs

CONNECTIVITY	
Connections	LAN / Ethernet
Image management software	MyRay iRYS (compliant with ISDP© 10003:2020 in accordance with EN ISO/IEC 17065:2012 certificate number 2019003109-2) and iPad iRYS viewer app (Free), STL (RealGUIDE*)
Supported protocols	DICOM 3.0, TWAIN, VDDS, SDK, CLOUD shared (RealGUIDE*)
DICOM nodes	IHE compliant (Print; Storage Commitment; WorkList MPPS; Query/Retrieve)
Virtual Control Panel	PC and iPad
IOT - Remote Monitoring	DI.VA. WEB-based applications & Easy Check with profiled user access (ISDP©10003:2020 compliant in accordance with EN ISO/IEC 17065:2012 certificate number 2020003704-2)

POWER SUPPLY	
Voltage and frequency	115 – 240 V Single phase    50 / 60 Hz
Maximum current absorbed in working conditions	20 A at 115 V; 12 A at 240 V
Current absorption in standby mode	Maximum 0,5 A (240 V); 1 A (115 V)
Notes	Automatic adaptation for voltage and frequency

\*Not available for Canada

## 2D version

X-RAY GENERATOR	
Generator type	Constant potential (DC)
Anode voltage	2D: 60-85 kV continuous emission 2D PAN* 70 kV : 60-70 kV continuous emission
Anode current	4 mA - 15 mA
Focal spot	0.5 mm (IEC 60336)
Exposure Control	Automatic. MRT (Morphology Recognition Technology)
Maximum continuous anode input power	42 W (1:20 at 85 kV/10 mA)
Inherent filtration	> 2,5 mm Al eq. (at 85 kV)
*Not available for USA/Canada	

DETECTOR 2D PAN & CEPH	
Detector type	CMOS (Csl)
Dynamic range	14 bit (16384 grey levels)
Height	PAN: 148 mm    CEPH: 223 mm

## 3D/2D version

X-RAY GENERATOR	
Generator type	PConstant potential (DC)
Anode voltage	3D: 90 kV pulsed emission (25% ON - 75% OFF) 2D: 60-85 kV continuous emission
Anode current	4 mA - 15 mA
Focal spot	0.6 mm (IEC 60336)
Exposure Control	Automatic. MRT (Morphology Recognition Technology)
Maximum continuous anode input power	42 W (1:20 at 85 kV/10 mA)
Inherent filtration	2D: > 2.5 mm Al eq. (at 85 kV) 3D: 6 mm Al eq. (at 90 kV) - with automatic da 3.5 mm

DETECTOR 3D/PAN	
Detector type	Amorphous Silicon (Csl)
Dynamic range	16 bit (65536 grey levels)

DETECTOR 2D CEPH	
Detector type	CMOS (Csl)
Dynamic range	14 bit (16384 grey levels)
Height	CEPH: 223 mm

