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Hyperion X5
3D/2D Ceph Imaging System



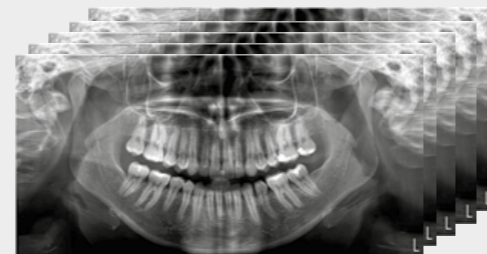
Designed to satisfy your every need.

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

However, Hyperion X5 is more than compactness and fast diagnosis: it's a user-friendly X-ray device with two sensors (one dedicated to volumetric examinations) and a set of smart automatisms that lets dentists obtain the desired outcome immediately. Designed for surgeries that require three-dimensional diagnostics, the 3D/2D-configuration Hyperion X5 offers just the right solution and simultaneously provides excellent 2D performance.

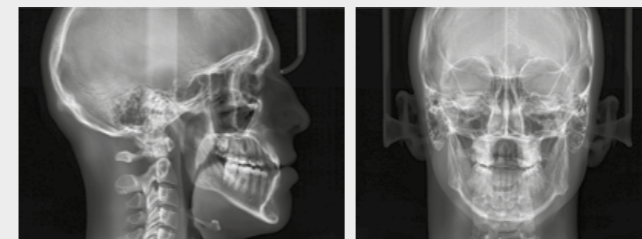
Greater performance, better diagnostics.

- Compact&Light
- Plug&Play
- Real-time diagnostics
- Easy to use
- Patient well-being
- Affordable technology



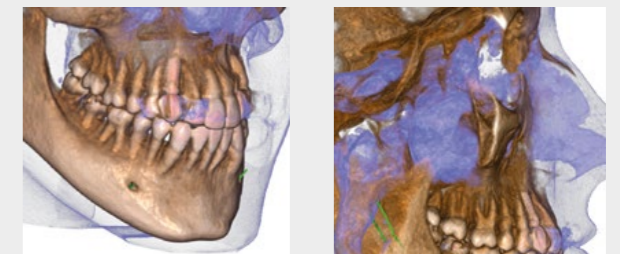
Focus-free 2D with MRT.

The PAN examination uses MRT (Morphology Recognition Technology) and an automatic best focusing selection system. A multi-layer panoramic scan is performed, with automatically optimised exposure and scan times for children and adults.



Cephalometric examination.

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



High resolution CB3D.

HD 3D imaging with ultra-fast, low-dose scans and very high resolution: 80 µm over the complete dentition, together with dedicated FOVs developed to ensure the best imaging at all times. Complete dental diagnosis, including assessment of maxillary sinuses.



Diagnostic flexibility.

Flexible, efficient and fast, the 3D/2D system covers most diagnostic requirements with ease. It does so thanks to settings designed to streamline procedures, optimise results and minimise both times and X-ray doses.

By adopting innovative 3D Cone Beam technology, Hyperion X5 generates an infinity of high definition data (80 µm) in a single scan, greatly reducing X-ray exposure. The MultiFOV feature adapts the FOV to the patient's specific build and diagnostic needs, from a minimum of 6x6 cm to a maximum of 10x10 cm. Moreover, Hyperion X5 offers a range of settings, such as the MultiPAN function which lets users choose the panoramic image best suited to highlighting the detail of clinical interest. Clever collimation, ultra-fast scans and short emission times ensure patients receive low X-ray doses.

Versatile and patient-friendly.

- MultiFOV CB3D, from 6x6 to 10x10 cm
- Ultra-high 80 µm resolution
- Fast CB3D scan (up to 6.4 µm)
- MultiPAN system
- Clever collimation
- Low dose



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 µm) or low-dose QuickSCAN (160 µm) protocols.

MULTI VISION



An advanced 2D image processing system lets users extract and analyse 5 different panoramic images from a single scan. Particularly useful for analysing patients with complex anatomies and/or virtually correcting post-capture patient positioning.

QUICK SCAN



Available with both 2D and 3D exams, QuickSCAN protocols minimise scan times and safeguard patient health by reducing X-ray doses.

All the potential of 3D.

Accessing the potential of 3D exams has never been easier or more effective. Thanks to dedicated mechanisms, patient positioning solutions and exclusive automatism that help ensure a positive outcome with every examination, dentists can exploit the full potential of 3D.

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

- Automatic sensor turret and collimation
- Ultra-high sensitivity 3D sensor
- Adjustable head support with 5 contact points



3D - PAN SENSOR

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

AUTOMATIC CEPH COLLIMATION

With cephalometric examinations the turret containing the 3D sensor automatically rotates and descends, aligning so its opening-equipped structure creates the collimation suitable for the examination. Moreover, the sensor is positioned so there is more space for the patient and the experience is a more comfortable one.

HEAD SUPPORT WITH 5 CONTACT POINTS

The dedicated head support for volumetric examinations has 5 contact points. Three of these - frontal, right and left - are adjustable. This improves patient positioning and, consequently, stability and clinical examination quality.



Simply CEPH.

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

The arm is extremely compact and the latest-generation sensor ensures optimal performance. Aided by programmed automatism, the sensor aligns perfectly to speed up the cephalometric examination. Users can select the examination that best suits their effective diagnosis requirements by selecting an ultra-fast or high quality scan.

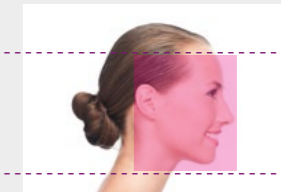
Ready for every requirement.

- Minimal bulk
- Ultra-fast scan
- FULL CEPH positioning



CLEVER COLLIMATION

The secondary teleradiographic image collimator is integrated in the rotary module, providing both outstanding compactness and easy access.

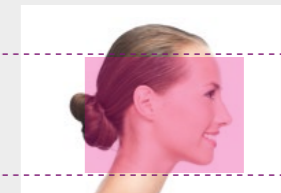


70% of irradiated area

● 20 cm

FULL CEPH

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



100% of irradiated area

● 30 cm

Technical characteristics.

IMAGES	2D	3D
Type	Complete or partial adult and child panoramic, QuickPAN Orthogonal Panoramic, MultiPAN, Dentition, Bitewing Frontal and Lateral (right and left) maxillary sinuses, Temporomandibular Joint (2 x Lateral + 2 x Frontal) open and closed mouth. AP-PA, LL Standard, Long, Quick, Carpal telerradiography.	Complete examination of the 2 arches in a single scan for adults and children (reduced collimation); Studies of the maxillary region with maxillary sinuses; Studies localized to region of interest.
Maximum resolution (MTF ₁₀)	PAN: 5 LP/mm CEPH: 3 LP/mm	Best quality: ≥ 2 LP/mm Voxel 80 μm (minimum section thickness)
Fields of view (mm)	PAN: 210 (length) x 115 (height) CEPH: 258 (length) x 194 (height) PAN Child: 180 (length) x 100 (height) Dentition: 140 (length) x 100 (height) Bitewing: 167 (length) x 70 (height)	DENT and SIN: 100 (diameter) x 100 (height) 100 (diameter) x 70 (height) 100 (diameter) x 60 (height) 80 (diameter) x 70 (height) 80 (diameter) x 60 (height) 80 (diameter) x 100 (height) 60 (diameter) x 70 (height) 60 (diameter) x 60 (height)
Maximum image data dimensions	PAN: 7.5 MB (single image) CEPH: 14 MB	720 MB
Magnification	PAN: 1.2 - 1.3 CEPH: 1.13	1 to 1 (isotropic voxel)
Scan time	PAN: 13.8 s (ORTHO); 12.3 s (STD); 6.8 s (Quick Scan) CEPH: 9.9 s (STD); 3.7 s (Quick Scan)	HD: 16.8s (Best Quality) Standard: 11.2s (Regular) Quick Scan: 6.4s (Low Dose)
Estimate of typical effective dose (ICRP 103)	PAN: 5 - 9 μSv	FOV: 10x10 35 μSv (Voxel 160 μm) - 80 μSv (Voxel 80 μm) FOV: 6x6 9 μSv (Voxel 160 μm) - 27 μSv (Voxel 80 μm)
Minimum image display times	RealTime	15 s
Advanced filters	PIE (Powerful image Enhancer) PAN Focus-Free	SMART (Streak Metal Artifact Reduction Technology)

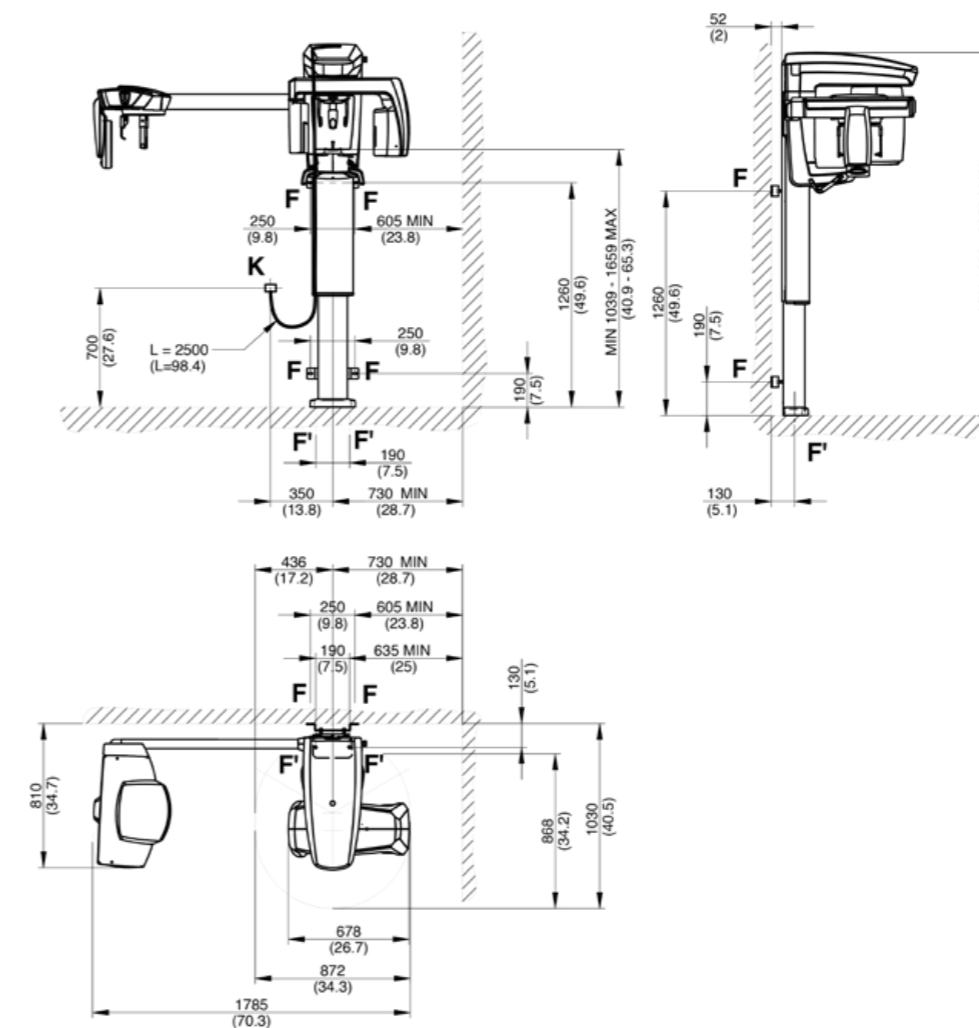
VERSION INSTALLATION	FLOOR-MOUNTED "STANDARD"
Minimum space requirement (L x D)	CEPH version: 1785 mm x 1030 mm
Package dimensions (L) x (P) x (H) in mm	Box1: 930 x 690 x 960 (Machine Base) Box2: 1860 x 355 x 350 (Floor-mounted) Box3: 575 x 1275 x 380 (Telerradiographic arm)
Weight	3D/2D version: 93.5 Kg (251lb) + CEPH: 21 kg (46lb)
Accessories	Free standing base

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 (3D Scout View)
Patient positioning	5 contact point, adjustable 3D/2D version right/left
Adjustments	2-speed height adjustment drive Keypad on machine and/or iPad app Servo-assisted alignment: Keypad on machine or remote control (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 and iPad iRYS viewer app (free)
Supported protocols	DICOM 3.0, TWAIN, VDDS
DICOM nodes	IHE compliant (Print; Storage Commitment; WorkList MPPS; Query Retrieve)
Virtual Control Panel	PC and iPad

3D/2D version

X-RAY GENERATOR	
Generator type	Constant potential (DC)
Anode voltage	3D: 90kV pulsed emission (25% ON - 75% OFF) 2D: 60-85 kV continuous emission
Anode current	4 mA - 15mA
Focal spot	0.6 mm (IEC 60336)
Exposure Control	Automatic. MRT Technology (Morphology Recognition Technology)
Maximum continuous anode input power	42W (1:20 at 85kV/10mA)
Inherent filtration	2D: > 2,5 mm Al eq. (at 85 kV) 3D: 6 mm Al eq. (at 90 kV)
3D/PAN DETECTOR	
Detector type	Amorphous Silicon (CSI)
Dynamic range	16 bit (65,535 grey levels)
2D CEPH DETECTOR	
Detector type	CMOS (Csi)
Dynamic range	14 bit (16,383 grey levels)
POWER SUPPLY	
Voltage and frequency	115 - 240 V single-phase 50 / 60 Hz
Maximum absorbed current under working conditions	20 A at 115 V, 12 A at 240 V
Current absorption in standby mode	Maximum 0.5A (240 V); 1 A (115 V)
Notes	Automatic adaptation for voltage and frequency



dimensions in millimetres (dimensions in inches)