**Introducing Morphology Recognition Technology.
Because adaptation is the first step of evolution.**

hyperion
Morphology Recognition Technology

Panoramic imager

myray
new comfort
in digital imaging

hyperion
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Panoramic imager

Advanced kinematics

HYPERION stands out on account of its complex kinematics, which feature a rotary movement combined with two simultaneous shifters.
Thanks to its capacity to follow the patient's complex morphology accurately, it ensures constant image enlargement.

Super-fast scans

Short exposure times, from a minimum of 4 seconds to a maximum of 9 seconds, reduce the possibility of patient movement during the examination.
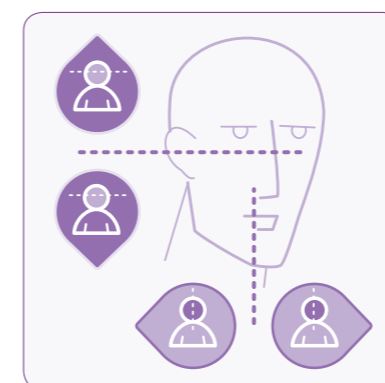
Automatic determination of exposure factors

HYPERION features innovative Morphology Recognition Technology (MRT) which automatically identifies patient size and all parameters required to ensure correct X-ray exposure.
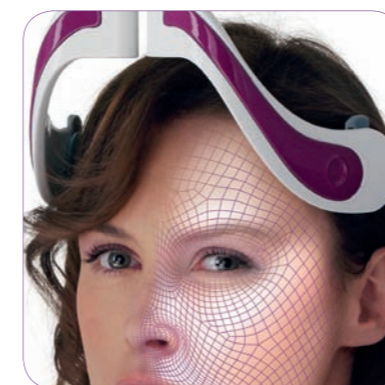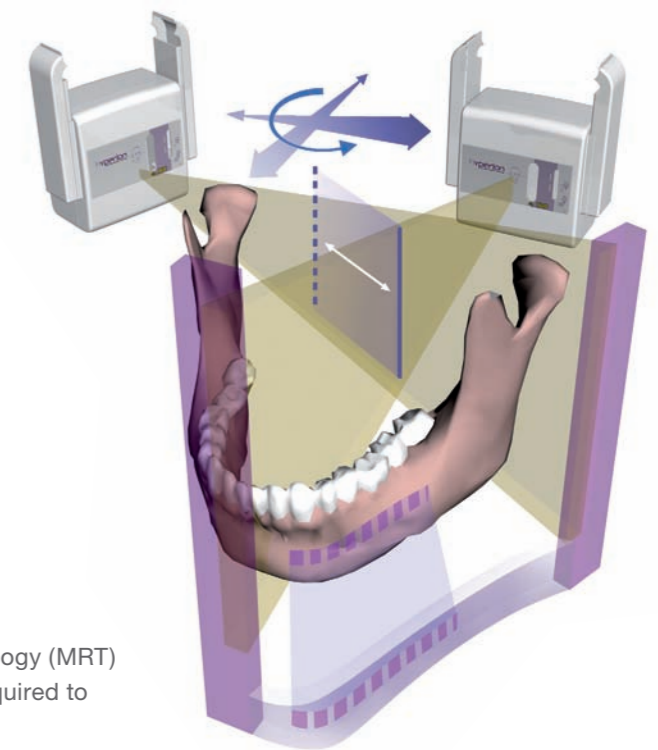
With MRT there's no need to program exposure times, kV or mA technical factors or even choose patient size.

HYPERION does it all, automatically, so you can focus on what matters the most: your patient.

Reassuring positioning

The two frontal touch-sensitive supports accompany the patient's head into the correct position, compensating for any asymmetries thanks to independent movement of the right and left supports.
The direct, frontal approach of HYPERION makes it a machine as comfortable for the dentist as it is for the patient.

Servo-controlled patient positioning

In panoramic imaging, correct patient positioning is of utmost importance to image quality.
Most equipment requires time-consuming manipulation of the patient's head in order to adapt to predefined uncomfortable postures.
HYPERION takes it the other way round: the patient stands still, while the laser-guided multi-motor kinematics positions itself around your patient.
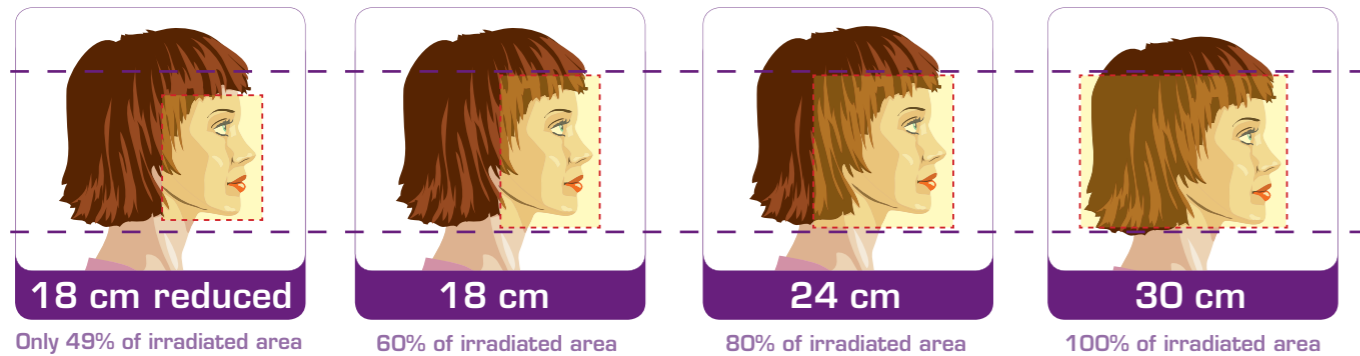
X7 Cephalometric Teleradiography

The **X7 Series** machines can host a teleradiography unit for anter-posterior, poster-anterior and lateral cranium scanning, including special projections such as the submentovertex.

Latero-lateral images benefit from automatic detection of the nasion point and automatic adaptation of exposure parameters for optimum representation of soft tissues and the aesthetic profile of the face.
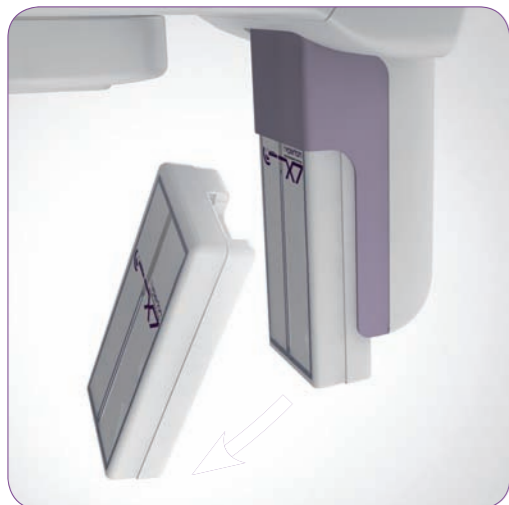
The rapid scan (minimum 3.6 seconds) allows the patient to maintain a stable position during the examination.

Collimation device

The primary servo-controlled collimator allows the user to select the area to be exposed, thus contributing to minimisation of the radiation dose.

18 cm reduced	18 cm	24 cm	30 cm
Only 49% of irradiated area	60% of irradiated area	80% of irradiated area	100% of irradiated area

Relocatable sensor

The machines in the X7 Series can house a relocatable sensor or two permanent sensors.
A safety system allows release of the sensor module so that it can be used for both panoramic images and teleradiography.

Storage compartment

Carpus support

Secondary collimator

As X-ray imaging takes lace HYPERION has no need for any bulky secondary collimator in motion close to the patient's face.
A precision fold-away device is incorporated in the rotary whole, thus making dentist/assistant movement easier during patient positioning.

Quick share with Ethernet or SDcard

HYPERION works standalone or connected to a PC, and you decide whether to store images safely on a memory card or share them over your local network through the industry standard Ethernet.

Artificial Intelligence

Virtual control panel

The virtual control panel, which can be installed on a PC, allows all diagnostic activities to be controlled from a workstation.

For example, the user can link up a mini tablet-PC with touch screen to pilot the machine while comfortably positioned outside the X-ray area.

Diagnostic programmes

15 different diagnostic programmes are available through the intuitive control panel, to satisfy any possible diagnostic need. Acquire automatically-selected standard and paediatric panoramic projections, frontal and lateral views of the maxillary sinuses, multi-angle lateral and posterior-anterior views of the temporo-mandibular joint.

The user controllable partial projections are a comfortable alternative to intraoral imaging, appreciated by those patients with strong gag reflex, creating a clear bitewings like views of molar and premolar regions.

Clinical cases

Panoramic detail

Maxillary sinuses

Latero-lateral teleradiography

3DTS
Dynamic exploration of the third dimension

Being able to glance through transversal slices of the area in question on a PC screen is extremely useful to whoever practices implantology, simply because it offers accurate radiographic data to work with, perfect for reliable measurements.
3DTS is a dedicated examination, with consequent reconstruction of data based on Tomosynthesis; it adds information on the third dimension – depth – of a specific region of the upper and lower dental arch by using a very limited X-ray dose.
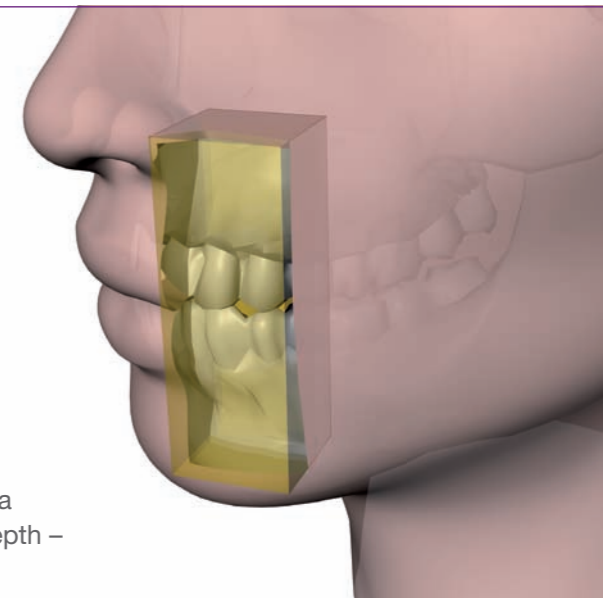
Whereas traditional stratigraphic panoramic imaging techniques produce between 2 and 4 static two-dimensional sections alone, in pre-defined anatomical positions, the 3DTS examination reproduces on a PC an entire anatomical portion of interest, which can be explored via orthogonal cross-sections laid out as you wish and apt for sequential viewing. This means you dispose of a useful tool for the evaluation of single implant sites, thus reducing the need to resort to CAT scan examinations except in the case of more extensive surgery, such as wide scale reconstruction which involves numerous implants across the entire arch.
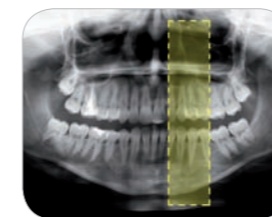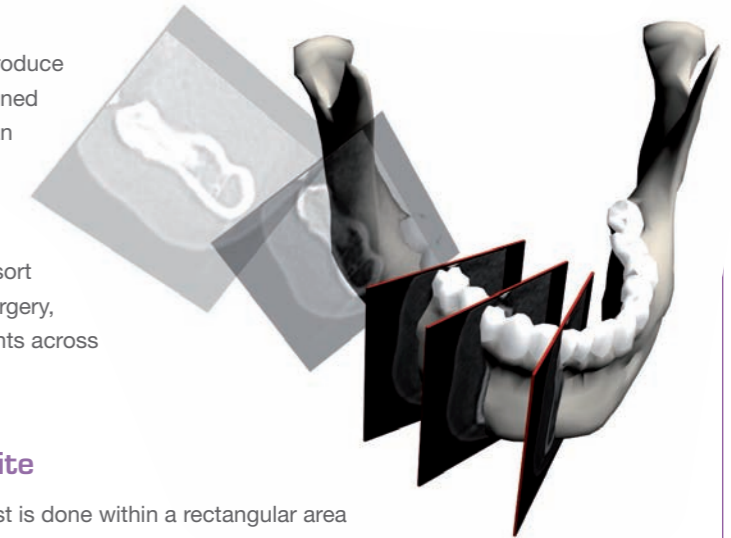
Inspection of surgical site

The selection of a region of interest is done within a rectangular area directly on a panoramic radiographic image of the patient in question, or by a template of an average patient.
Field of view: 4x4x10cm.
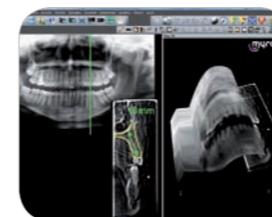
Reliable 1:1 measurements

Right after acquisition, the powerful rayMage software will fold the panoramic image along the curved path of the focal trough, and let you browse through the field of view, slice by slice, allowing for reliable 1:1 measurements of the transversal slices, with the precision of 0.15mm pixel size.
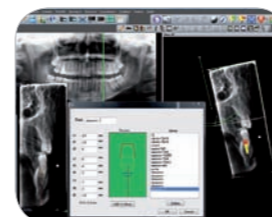
Implant Template

Once the virtual implant is in place, browse the slices in real-time to make sure it fits throughout the entire implant site.
Customize the template to represent your favourite screw set and abutments.
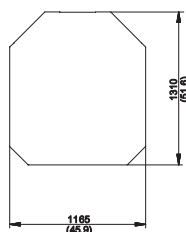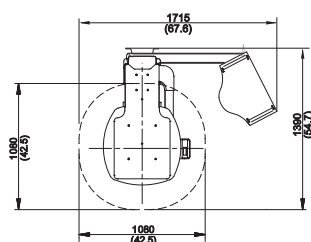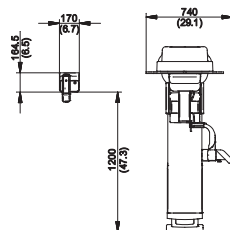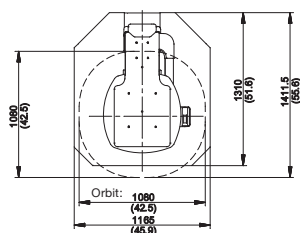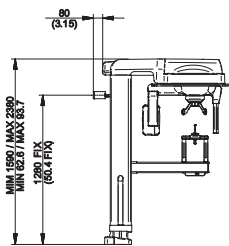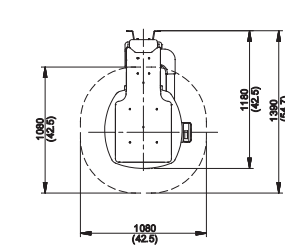
Technical data

Power supply specification
- voltage: 115 - 240 Vac, ± 10%, with automatic adaptation
- frequency: 50 / 60 Hz ± 2 Hz, with automatic adaptation
- current: 7A at 240V, 15A at 115V, nominal temporary peak absorption
- current absorption in standby mode: max 1A

Technical factors
- anode voltage: 60 - 85 kV, automatic and manually selectable in steps of 1
- anode current: 1 - 10 mA, automatic and manually selectable in steps of 1, in the whole kV range
- mA and kV pattern modulated in real time during X-ray exposure
- automatic compensation of the spine absorption
- duty cycle 1:20 at full power operation (85kV, 10mA)
- focal spot 0.5 – IEC 60336 (1993)
- inherent filtration: 3.4 mm Al equivalent, at 85 kV
- embedded X-ray shielding behind receptor, 1.5 mm Pb, exceeding requirements of IEC60601-1-3
- exposure time panoramic: 7.9s for child, 9.2s for adult
- teleradiographic exposure time: from 3.6 seconds to 10 seconds depending on the examination
- exposure time range: 160ms – 14s (R10 scale)

Image acquisition device
- technology: CCD (charge coupled device)
- direct exposure protection: FOP (Fibre Optics Plate)
- pixel size: 48 x 48 µm
- grey levels: 16384 - 14 bit A/D conversion
- resolution: more than 5 LP/mm

Image file
- image size: 1536x2725 pixel
- transfer time: max 10 sec for complete presentation on PC screen (Ethernet)
- file size: max 8 Mb uncompressed

Installation Requirements
- weight: 159 kg (351 lbs)
- weight with teleradiographic arm: 187 kg (412 lbs)
- telescopic motorized column
- wall or floor support, free standing base available
- dimensions in millimetres (and inches) - see scheme

PC requirements
- supported operating systems: Microsoft® Windows® XP Service Pack 2 or later, Microsoft® Windows® Vista, Windows® 7
- display setting: 1024 x 768 or higher, 32 bit true colour

Free standind base

MCEFGB101S00

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Data subject to change without notice.

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