

Focused diagnostics:  
Sirona intraoral X-ray system.



HELIODENT DS

SIDEXIS



The Dental Company

sirona.



## Benefits that appeal to patients: Outstanding image quality and low radiation doses.

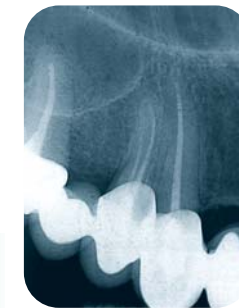
*The key priority* in X-ray diagnostics is to minimize the patient's exposure to radiation.

### The ideal solution: Multipulse technology for consistently hard radiation

Compared with conventional single-pulse generators, the multipulse generator of the HELIODENT DS delivers harder, more highly energized radiation. This is your passport to excellent definition, outstanding detail recognition and balanced contrast across the entire image – at the low exposure voltage level of 60 kV. Due to the lower proportion of soft radiation, the multipulse generator reduces the skin surface dose by an impressive 20%. In combination with the beam-limiting device the HELIODENT DS keeps radiation exposure to an absolute minimum.



*Apical osteitis 13 with suspected abnormal relation to maxillary sinus*



*Bridge prosthesis after loss of 12 and 15, condition following root filling of 13, 14 and 16*



*Apical osteitis*



*Incomplete root filling/medicated temporary filling, suspected apical osteitis mesial*

### Digital: Short exposure times guarantee an even lower radiation dose

Digital intraoral radiography offers decisive benefits in terms of dose reduction. The new SIDEXIS sensors with their highly sensitive imaging surfaces are designed for extremely short exposure times. Compared with X-rays made on type D film the radiation dose can be reduced by 90% (50% by comparison with type E film).

*HELIODENT DS:  
The flexible support  
arm is quick and  
easy to position.*



*Remote timer: ideal for operating the HELIODENT from outside the treatment area.*

### The benefits in brief: HELIODENT DS

- **Brilliant image quality**  
Multipulse generator ensures sharp contours and fine detail
- **Film-based and digital images**  
Individually adapted exposure times and beam-limiting devices

### Digital with SIDEXIS

- **Perceptible intraoral dose reductions**  
Up to 90% compared with category D film; up to 50% compared with category E film.
- **Beam-limiting device for digital X-rays**

# Designed down to the last detail: Easy operation and reliable positioning.

**Ease of operation** is a decisive factor in successful radiography. The flexible support arm with its wide operating radius allows you to position the HELIODENT DS with the utmost precision. Thanks to its sturdy construction the support arm does not vibrate, which means that X-ray exposures can be triggered immediately.

The HELIODENT DS is easy to use, thus effectively ruling out flawed exposures and costly repeat X-rays.

## The benefits in brief: HELIODENT DS

- **Simple positioning**  
Flexible support arm with wide operating radius: 1520, 1810 or 2060 mm
- **Easy operation**  
Control knob with clear patient and tooth icons and digital display for exposure time

## SIDEXIS

- **Two sensors**  
Equipped for every eventuality  
**Full Size Sensor:**  
Active surface: 26 x 34 mm;  
external dimensions:  
30.7 x 40.7 mm;  
**Universal Sensor:**  
Active surface: 20 x 30 mm;  
external dimensions:  
25.4 x 36.7 mm
- **Simple positioning**  
Special positioning clips are available for X-raying the anterior teeth and molars as well as for bitewing and endodontic applications. 3 metre cable for optimum freedom of movement

## Easy-to-read icons and digital display

The exposure settings on the HELIODENT DS are selected with the aid of the multifunctional control knob and the unambiguous patient and tooth icons. The pre-programmed exposure time appears in the digital display and can be adjusted to suit all standard commercially available film speed categories. You also have the option of selecting individual exposure times. At the touch of a button the HELIODENT DS can be switched over to the ultra-short exposure times required for digital radiography – e.g. for SIDEXIS or a similar digital intraoral X-ray system.



SIDEXIS Full Size Sensor



SIDEXIS Universal Sensor

## New: two SIDEXIS sensors cover a complete range of diagnostic applications

The new SIDEXIS Full Size Sensor is the ideal solution for dentists who want to upgrade their HELIODENT DS (or another X-ray system) to digital technology. Despite its compact external dimensions, the sensor has an active surface measuring 26 x 34 mm. This means that you can accommodate three molars (from crown to root) on a single exposure. The Full Size Sensor is also ideal for tooth-status, bitewing and endodontic applications.

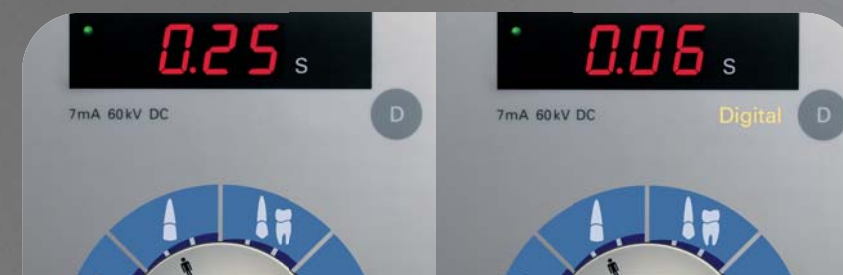
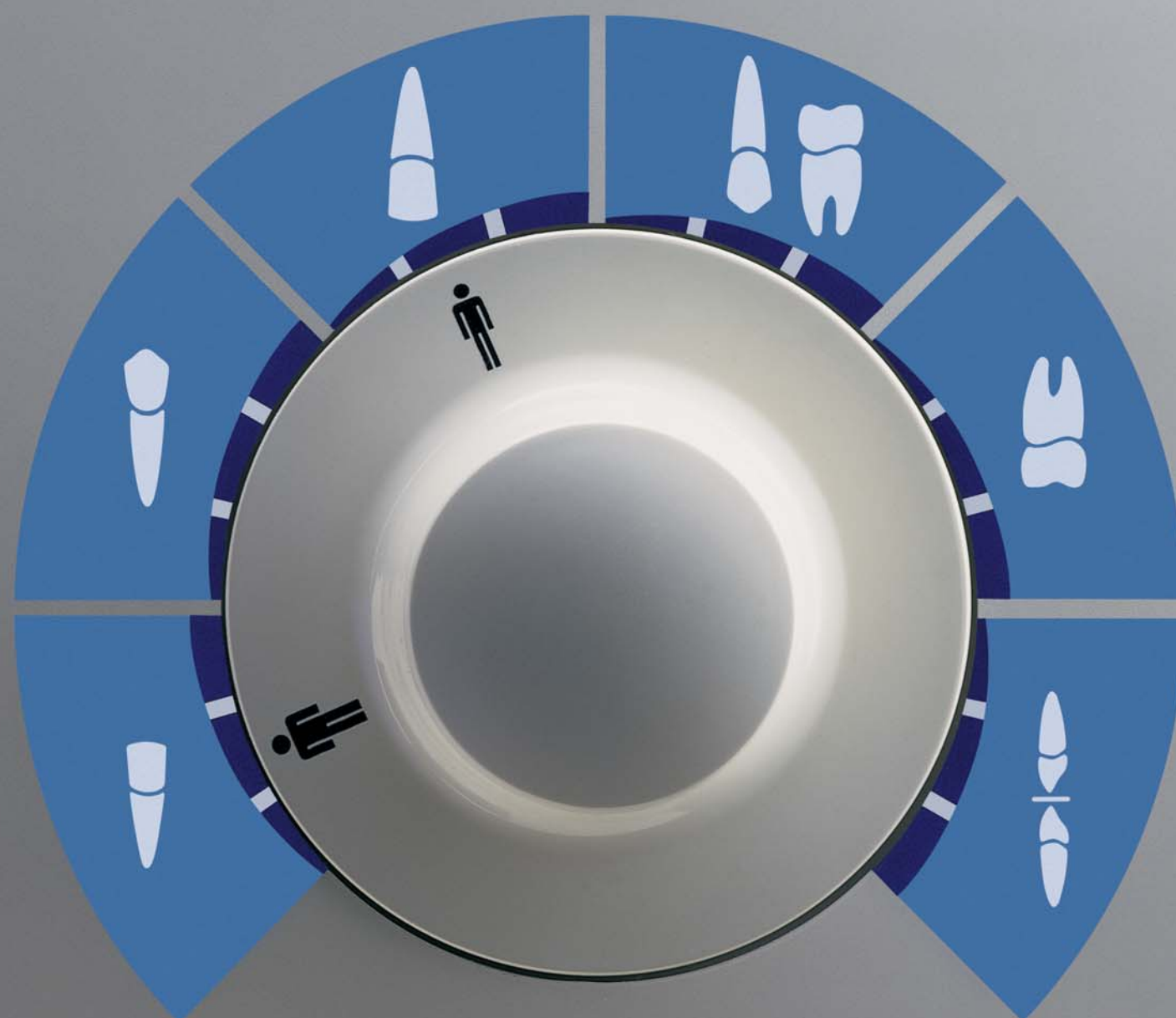
With its rounded edges the Full Size Sensor is easy to position and avoids any discomfort to the patient. Special positioning clips are available for X-raying the anterior teeth and molars and for bitewing and endodontic applications. The Full Size Sensor also comes with positioning rods for right-angle radiographs, as well as hygienic protective sleeves. The 3 metre connecting cable gives you ample room for manoeuvre.

In the event that the Full Size Sensor is too bulky (e.g. for young children) you can deploy our Universal Sensor, which has an active surface of 2 x 3 cm. Apart from its slightly smaller dimensions it offers the same convincing performance characteristics as the Full Size model.

*Facing page (large illustration):*  
HELIODENT DS: simple exposure time selection via control knob and tooth and patient icons.

*Facing page (inserts):*  
The short exposure times for digital X-rays are activated at the touch of a button.

7mA 60kV DC



# Benefits all the way down the line: SIDEXIS digital radiography system.

*Digital radiography* opens up a multitude of innovative possibilities in diagnostics and practice management. You can dispense with a darkroom. The X-rays are displayed in real time on your PC, where they can be edited and stored for future reference. Your practice operates more smoothly and efficiently. You save time, money and valuable space – and help to reduce environmental emissions.

## New: the X-ray terminal system

In the past, each digital intraoral sensor required its own PC. This is no longer the case. Instead, the sensors can be plugged into an X-ray terminal (available either as a wall-mounted unit, or as a X-ray box on the treatment unit). As a result, each PC in your practice can communicate with

each X-ray terminal. You can take X-rays in any room of your choice. All you have to do is attach either the Full Size or Universal Sensor to the terminal. Indicator lights tell you which sensor is attached and that the X-ray system is ready. The images are then transmitted to the PC, where they are stored automatically in a patient-related archive.



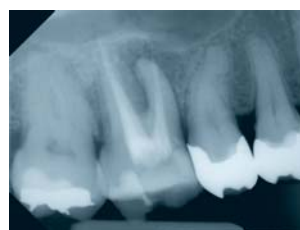
The SIDEXIS software for digital X-ray offers more with your X-ray images.



Wall-mounted X-ray terminal for SIDEXIS sensors. A X-ray terminal on the treatment unit is also available. Both are directly networkable.



The battery-powered SIDEXIS USB-Box is the simple alternative for a stand-alone X-ray terminal. In conjunction with a laptop, it forms a mobile X-ray station.



Root filling 16 with periapical translucence mesially. Apical periodontitis.



Condition after apicectomy 25. Horizontal bone destruction with intraosseous pockets. Clear superimposition figure of the zygomatic bone with very flat, hard palate.



Extensive carious defect 37.



Normal.

## The benefits in brief: SIDEXIS

- Correctly exposed, razor-sharp images in real time
- No film processing, no darkroom
- Image processing on PC
- Automatic archiving
- Improved patient communication
- Convincing networking capabilities  
Direct Ethernet connection. Each PC can communicate with each individual wall-mounted X-ray terminal or X-ray terminal on the treatment unit.



## Putting your needs first: HELIODENT DS adapts flexibly to your practice facilities.

*The individual* layout of your practice determines what items of equipment you place where.

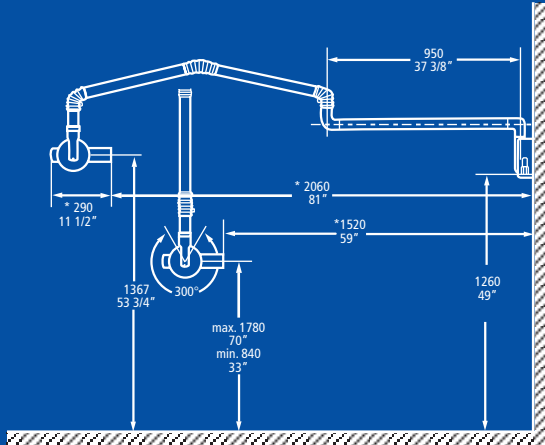
The HELIODENT DS is available in three different versions, each adapted to your specific needs. The wall-mounted version comes in a choice of three different support arms (short, long or extra long). For direct chairside applications the HELIODENT DS is also available as a combined ceiling-mounted unit together with the SIROLUX Fantastic lighting system. And if you want to carry out X-ray examinations at various locations in your dental practice, the mobile HELIODENT DS model is the ideal choice.

Sirona caters for a full range of individual wishes in the area of intraoral radiography. To find out more about our film-based and digital solutions for panoramic/cephalometric radiography, we recommend you read our ORTHOPHOS brochures. Your local dealer will help you select the optimum equipment configuration for your dental practice. Just give him a call.

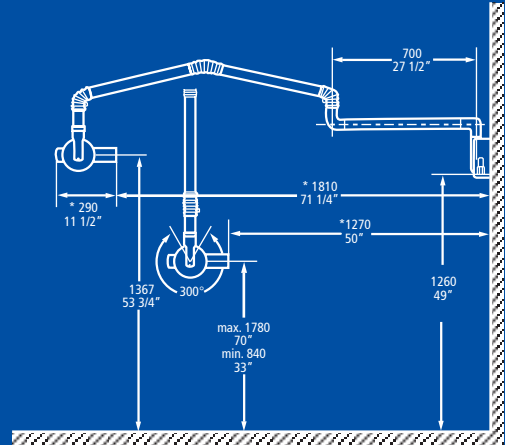
### HELIODENT DS: Technical data

X-ray tube	SR 60/7 L
Focal spot	0.7 (IEC 336)
Total filter	min. 2.5 mm AL
Exposure voltage	60 kV multipulse
Exposure current	7 mA
Power requirement	1.1 kW
Fuse	16 A (slow blowing)
Exposure time	0.01 – 3.2 s (electronically controlled, selectable digital mode)
Power connection/ Permissible line voltage fluctuations	208 – 230 V, 50 – 60 Hz/+ 6%, – 10% 100 – 125 V, 50 – 60 Hz/± 10%
Focal length cone	
Standard	20 cm / 8"
Optional	30 cm / 12"

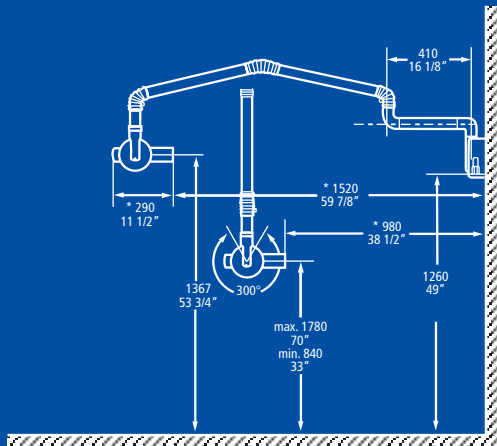
## HELIODENT® DS with extra long support arm



## HELIODENT® DS with long support arm



## HELIODENT® DS with short support arm



## HELIODENT® DS mobile unit

