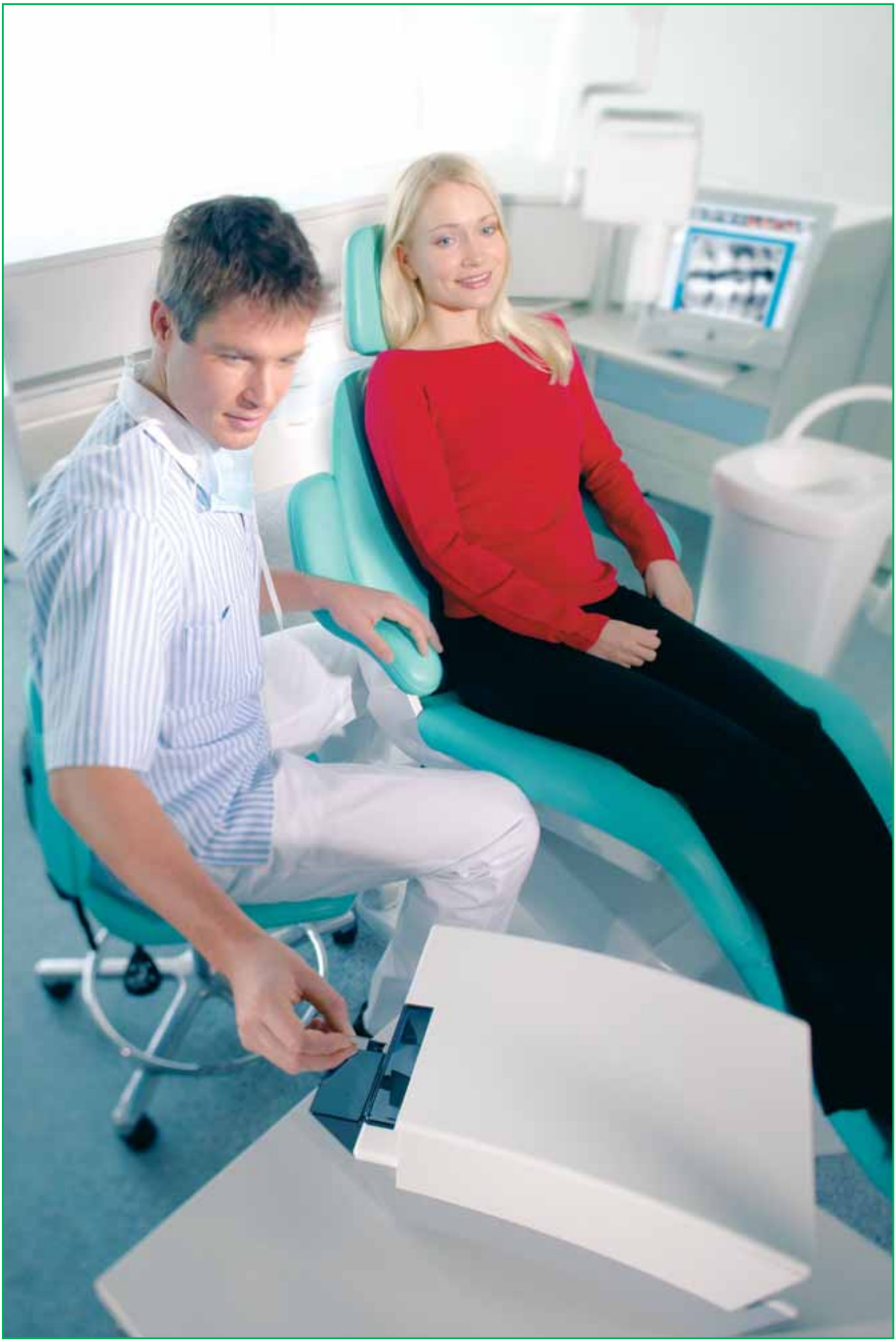
DIGORA® OPTIME

Chairside digital

Imaging Plate System

SOREDEX



The complete digital intraoral Imaging Plate System

Speed and performance

The DIGORA® Optime intraoral digital imaging system is designed to make work in the dental office easier and more efficient. The DIGORA Optime is small, easy to use and fast to operate. Together with the new DIGORA for WINDOWS 2.5 dental imaging software, it will increase image processing speed and workflow efficiency.

Efficient workflow
The DIGORA Optime imaging procedure has been designed to be as simple and easy as possible so that workflow in your dental office is more efficient. The DIGORA Optime imaging procedure is fast;

- Imaging plates are as easy to position in the patient's mouth as film
- the readout process is completely automatic
- readout time is very short
- no additional adapters nor equipment (such as an erasure box) are needed.

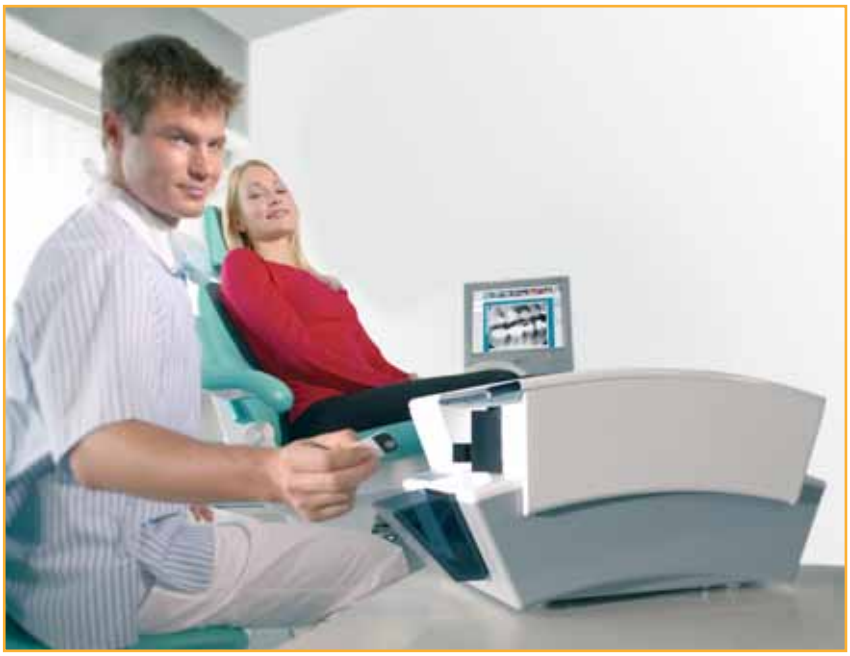
These advantages reduce the number of tasks you have to do, thus making everyday work more efficient and flexible. This ultimately gives you more time for your patients.

Compact size
The DIGORA Optime's size means that you can place it in the most convenient position for your way of working. Positioning the unit where you want will improve your workflow and make daily work more efficient and comfortable.

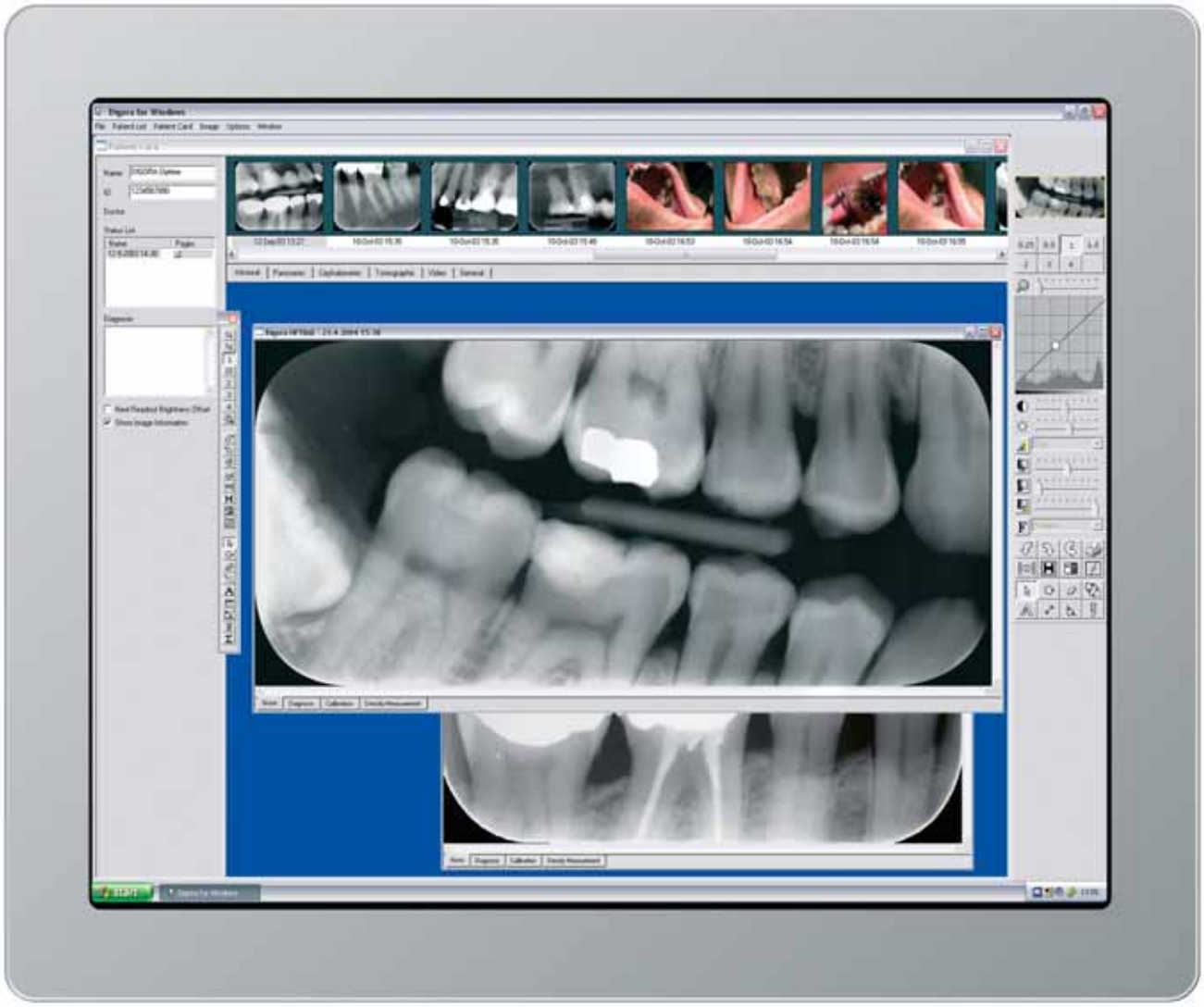
Smart design
The DIGORA Optime is smart. It is operated with just two buttons, the on/off and the start button. Insert the exposed imaging plate into the DIGORA Optime and everything is done automatically.
The DIGORA Optime was designed right from the start to be easy to use and integrate efficiently into the dental office.

Quick readout time
Quick readout time makes it possible to feed imaging plates continuously, for example, when a full mouth x-ray series is taken.

Full daylight use
DIGORA Optime is small and can be used in full daylight conditions. This makes it easy to place in the most convenient location in your practice.

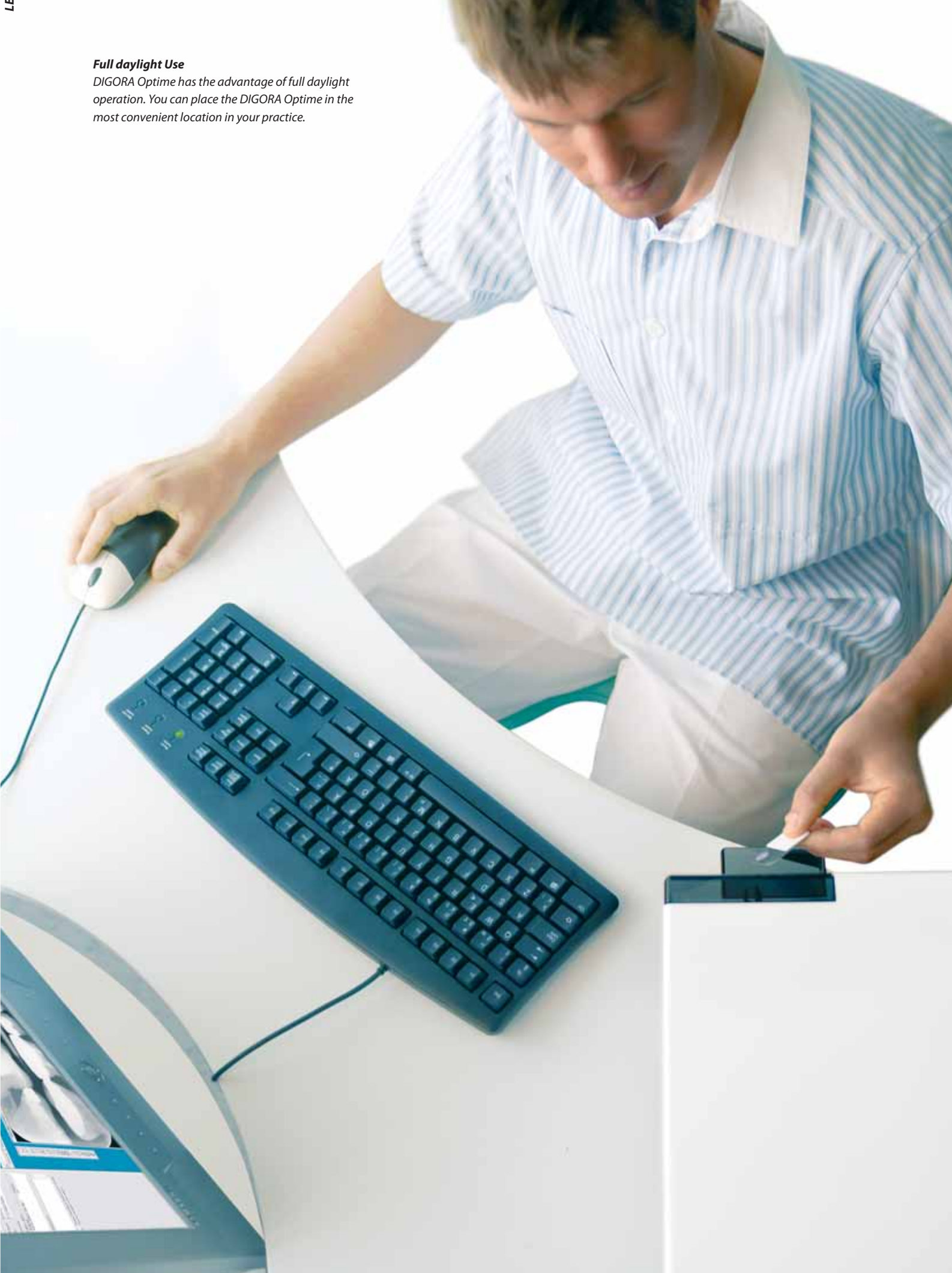


- Chairside operation
- Quick and ergonomic to use
- Outstanding dynamic range - consistent image quality
- Full daylight operation
- No chemicals, film processor nor dark room needed
- Imaging plates are thin, cordless, reusable and easy to position
- Four (4) imaging plate sizes
- Compatible with AC and DC intraoral x-ray units
- New DIGORA for Windows 2.5 software
- Implant Planning module and extensive Implant Library
- Versatile image handling features
- Fast Ethernet connection



Full daylight Use

DIGORA Optime has the advantage of full daylight operation. You can place the DIGORA Optime in the most convenient location in your practice.



Efficient workflow

Smart, Auto-functions are the key to efficient workflow. DIGORA Optime is fast and easy to use because of its innovative design and functionality.

AutoDetect
DIGORA Optime automatically identifies the size of the imaging plate inserted – there is no need for separate adapters or holders. AutoDetect enhances operating convenience and improves workflow.

AutoStart
AutoStart means no buttons to push to start the readout. The DIGORA Optime detects when an imaging plate has been inserted and the readout begins automatically.

AutoErase
DIGORA Optime has a built-in erasing system, so there is no need for a separate erasure accessory. The automatic erasing system ensures that imaging plates are ready for immediate reuse.

AutoEject
AutoEject simplifies the workflow. After the imaging plate is read and erased it is automatically ejected. The unit is then ready for the next imaging plate.

AutoOptimization
AutoOptimization adjusts the brightness and contrast of the image automatically. Due to SOREDEX Imaging Plates and DIGORA Optime's built-in system intelligence feature, image quality is optimized.

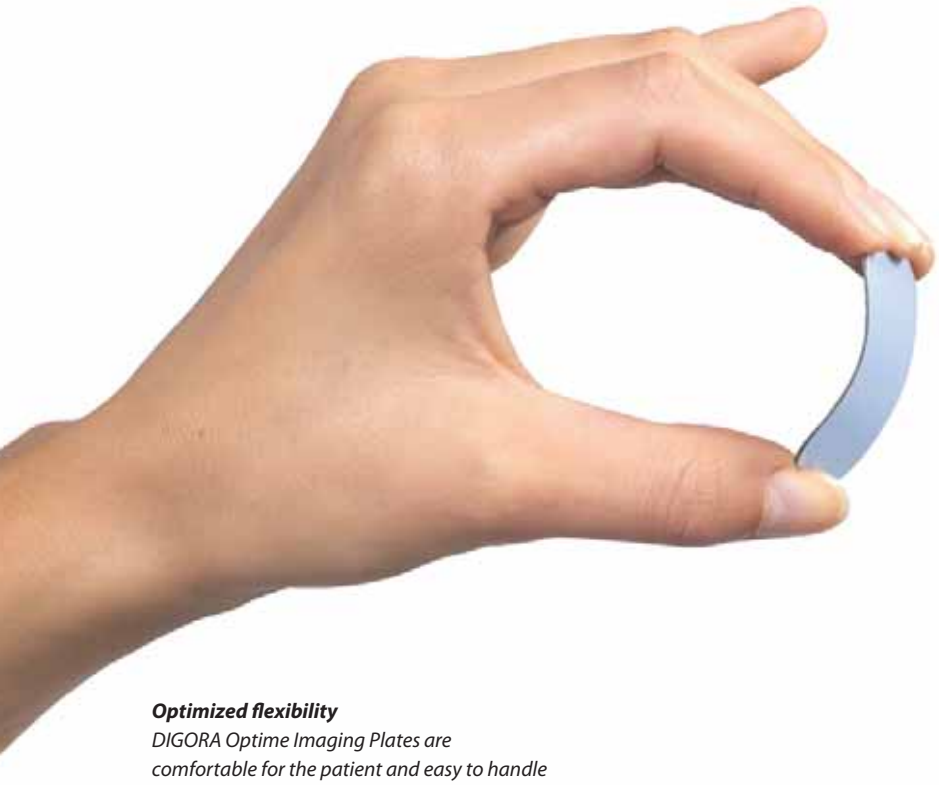
AutoSleep
DIGORA Optime automatically switches to the Sleep mode when it is not used for a certain period of time. This can be easily configured to meet your needs.

The size of the imaging plate is automatically detected.

Automatically erased imaging plates are ejected into the plate collector for immediate reuse.

Thin and flexible

Thin and reusable DIGORA Imaging Plates are as easy to place and position as conventional film. Imaging plates can be placed accurately both horizontally and vertically – you can take exact intraoral projections. By using imaging plates you can reduce the number of retakes.



Optimized flexibility
DIGORA Optime Imaging Plates are comfortable for the patient and easy to handle for the user. The imaging plates are flexible enough to enable easy and precise positioning and comfort for the patient, while being rigid enough to minimize distortion.

DIGORA Optime Imaging Plates can be used with virtually any film holder.

Imaging plate covers
The covers protect the imaging plates and therefore extend their usable life considerably. The covers protect the imaging plates from cross-contamination and light after the hygiene bag is removed.

Hygiene bags
New two-colored hygiene bags make positioning simple and eliminate the possibility of cross contamination. Sealing and opening the hygiene bags is effortless.

Marker
The new DIGORA Optime Imaging Plates include a marker that is visible on the image if the imaging plate is exposed the wrong way round. Appearance of the marker on the image does not eliminate any important diagnostic information, it just indicates that the image must be mirrored using DIGORA for Windows tools. Another exposure is not necessary.

100% active area

Cordless and easy to use

DIGORA Optime is supplied with four standard intraoral sizes: 0, 1, 2 and 3 imaging plates.

0

22 x 31 mm
550 x 775 pixels
833 KB

1

24 x 40 mm
600 x 1000 pixels
1.17 MB

2

31 x 41 mm
775 x 1025 pixels
1.55 MB

3

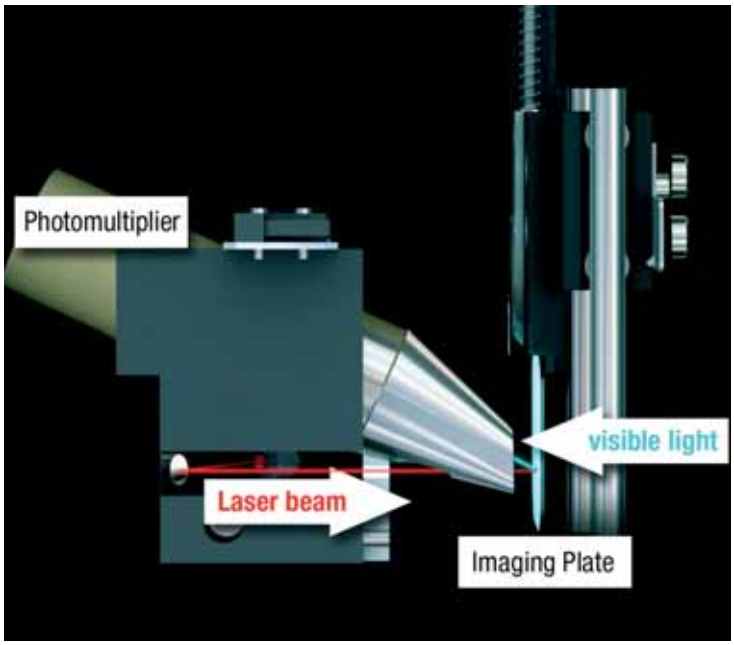
27 x 54 mm
675 x 1350 pixels
1.78 MB

The transparent imaging plate storage box ensures that the imaging plates are kept free of dust and ready for immediate use. Liquid-resistant easy-to-use disposable hygiene bags along with the imaging plate covers protect the imaging plate during the exposure.

Clinical image quality

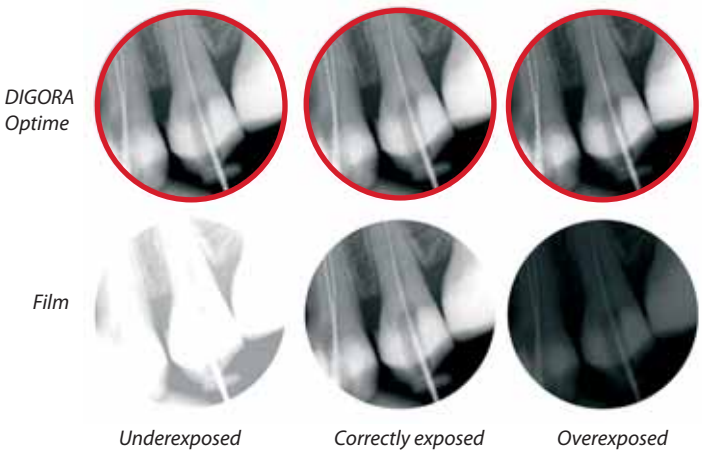
Clinical image quality is a result of the whole DIGORA Optime concept. The DIGORA Optime System uses highly sensitive and intelligent Imaging Plate Readout technology to achieve high quality images with an exceptionally wide dynamic range. The result is that even small details like 0.06 mm root canal files are visible. In addition, the DIGORA Optime System virtually eliminates under- and overexposed images. Fewer retakes means good news for you and your patients.

Optimal signal-to-noise ratio
In digital imaging, an optimal signal-to-noise ratio is important to create images of the highest quality. Too much noise results in a loss of diagnostic information. DIGORA Optime is designed with a short light path from the imaging plate to the photomultiplier tube to minimize the noise in the signal.



Readout principle of imaging plates
Schematic diagram illustrating the scanning of the imaging plate with a laser to stimulate luminescence, which is converted into an electrical signal by a Photomultiplier.

Wide dynamic range
An often-overlooked factor in an imaging system is its dynamic range. A wide dynamic range means the system can produce quality images over a broad range of x-ray exposure values. Film and some sensor systems require specific values to achieve good results. The dynamic range of DIGORA Optime means consistent results without having to change exposure settings for each patient. It also makes it compatible with both AC and DC x-ray systems.



DIGORA for Windows Software

DIGORA for Windows Software includes an extensive range of useful features and functions designed to make your work quicker, easier and more accurate. Functions such as state-of-the-art image enhancement tools, image acquisition, versatile multiple image viewing and handling, and accurate image measuring functions make DIGORA for Windows one of the most advanced dental digital imaging programs on the market today.

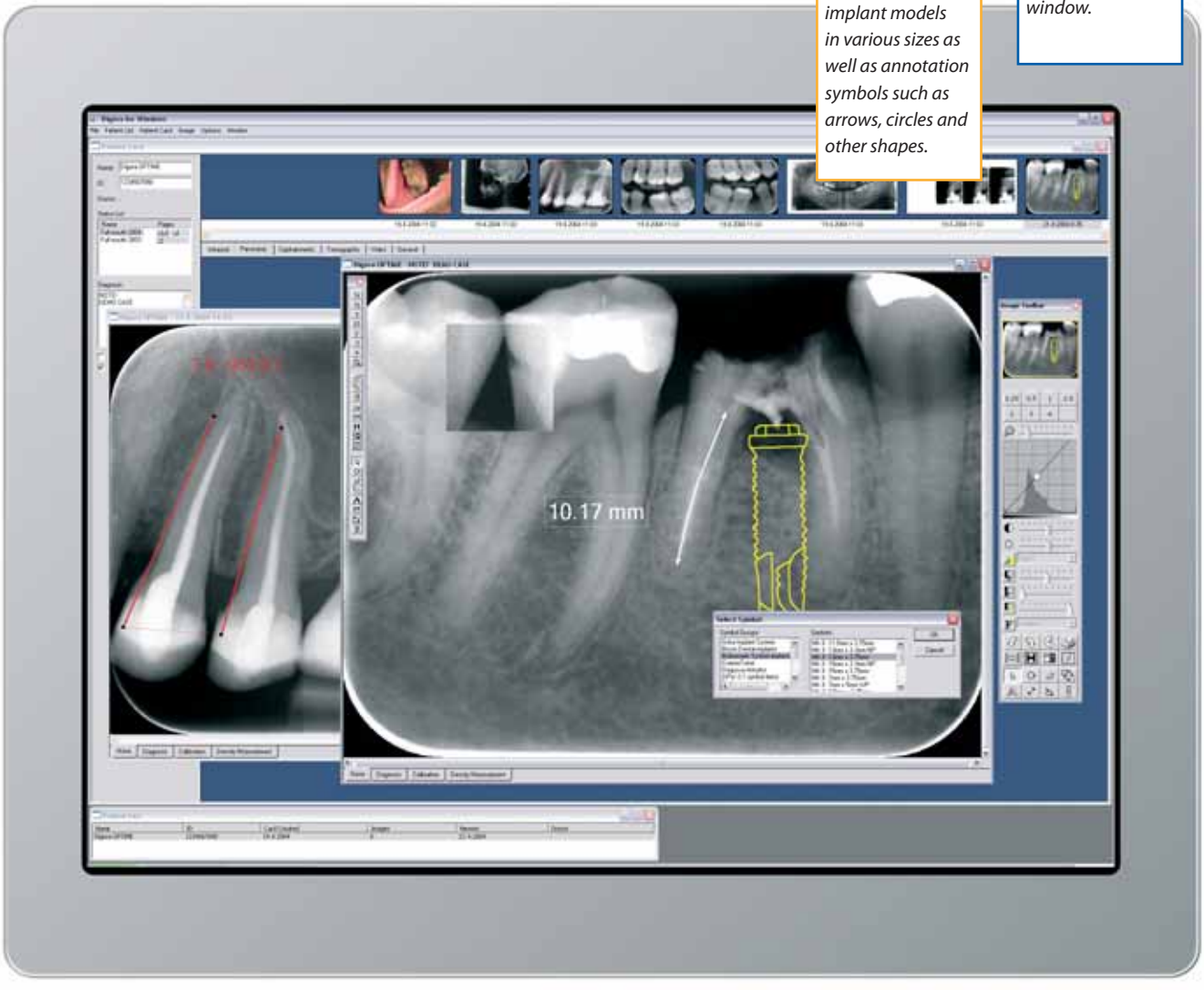
In addition, a practical Implant Planning Module and an extensive Implant Model Library make it possible to choose and easily superimpose different implant models on any type of dental digital image. The image calibration function allows the implant models to be scaled to the exact size to match the magnification of the image.
DIGORA for Windows supports 8 to 16-bit grayscale and 24-bit True Color images.

Easy and accurate measuring tools for length, density and angles. The QuickMag tool allows you to magnify and survey any part of an image.

DIGORA for Windows handles digital intraoral images, panoramic, cephalometric, tomographic and video images

The Implant Model Library includes many commonly used implant models in various sizes as well as annotation symbols such as arrows, circles and other shapes.

Toolbox
Tools can be free floating or docked to either side of the application window.



Single user or network

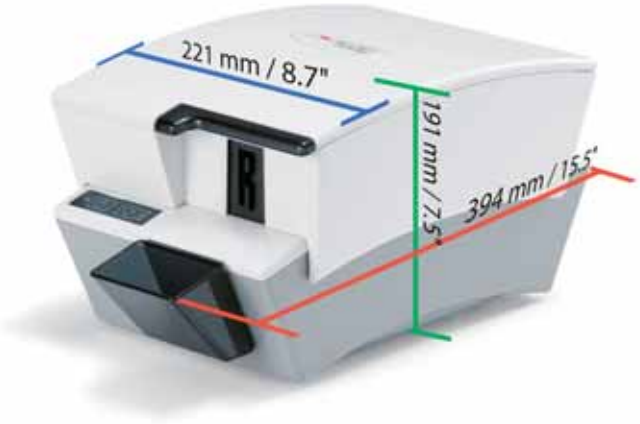
Versatility
The DIGORA Optime system and dedicated network software make it possible for a single DIGORA Optime to be shared by many dentists at the same dental office or clinic. It is also possible to have a DIGORA Optime in each dental operatory and store image data in a common database. The system is flexible and easy to use in different environments.

Integration
DIGORA for Windows software can be integrated with other Windows-based patient management and clinical application software. DIGORA for Windows offers a dynamic growth path for future developments and new applications.

Link to DICOM
DIGORA for Windows can be used together with SorCom Image Capturing Software as a bridge to DICOM archiving systems and hospital information systems. SorCom handles image acquisition and can store images to a DICOM archive and retrieve the hospital modality worklist.

DIGORA for Windows 2.5
with optional DICOM supplements is fully compatible with the DICOM 3.0 standard.

Technical data



DIGORA Optime technical data

Pixel size, selectable
40 µm (Super), 64 µm (High)

Bit depth
14 bits grayscale

Spatial resolution
12.5 lp/mm

Readout time
4.3 - 7.5 seconds

Interface cable
UTP (RJ-45) Ethernet required, not supplied (max. 2.5m). Connection to the PC must meet IEC 60601-1 and/or corresponding IEC harmonized national standard.

DXR 50 Classification IEC60601-1
- Class 1 equipment
- Continuous operation
- IPX0 (enclosed equipment without protection against ingress of liquids)

Dimensions (H x W x D)
191 mm x 221 mm x 394 mm (7.5" x 8.7" x 15.5")

Weight
7 kg (15.5 lb)

Operating voltage
100 – 240 V, 50/60 Hz

Operating current
Less than 1.3 A

Operating environment
+10°C – +40°C, 30 – 90 RH%, 700 – 1060 hPa

Operating position
Horizontal, on a stable, vibration-free surface

Storage / transportation environment
-10°C – +50°C, 0 – 90 RH%, 500 – 1080 hPa

System configuration

DIGORA Optime unit for Imaging Plate Readout

Application software (Digora for Windows 2.5)

Imaging Plate set:
0 2 pieces
1 2 pieces
2 5 pieces
3 1 piece
+ Storage box for Imaging Plates

Four (4) boxes of disposable hygiene bags
Size 0 x 100 pieces
Size 1 x 100 pieces
Size 2 x 100 pieces
Size 3 x 100 pieces

Bite covers for Imaging Plates
Size 0 x 100 pieces
Size 1 x 100 pieces
Size 2 x 100 pieces
Size 3 x 100 pieces

User's manuals for the unit and software

Installation manual for software

Computer requirements

	Single user PC	Network PC	Network server PC
Operating system	Windows NT 4.0 SP6a, 2000 SP4, XP SP1 or SP2	Windows NT 4.0 SP6a, 2000 SP4, XP SP1 or SP2	Windows NT 4.0 Server SP6, 2000 Server SP4
PC	Pentium 4 CPU or better, CD-ROM, CD-RW drive recommended	Pentium 4 CPU or better, CD-ROM, CD-RW drive recommended	Pentium 3 CPU or better, CD-ROM
RAM	256 MB or more	256 MB or more	512 MB or more
Hard disk	20 GB or more	20 GB or more	20 GB or more
Monitor (minimum / recommended)	17" XGA, 1024x768, True Color, 75 Hz / 19" UXGA, 1280x1024, True Color, 85 Hz	17" XGA, 1024x768, True Color, 75 Hz / 19" UXGA, 1280x1024, True Color, 85 Hz	No requirement
Display adapter	16 MB video memory or more	16 MB video memory or more	No requirement
Network adapter card	100 Mbits/s Ethernet	100 Mbits/s Ethernet	10/100 Mbits/s Ethernet
Network protocols	TCP/IP	TCP/IP or NetBEUI	TCP/IP or NetBEUI
Back- up	Tape drive (SCSI) or other back-up device	See server requirements	Tape drive (SCSI) or other back-up device
Other		One workstation should have CD-RW drive for archive purposes	(UPS) Uninterruptible Power Supply

DIGORA Optime Imaging Plates

	0	1	2	3
Dimensions	22 x 31 mm	24 x 40 mm	31 x 41 mm	27 x 54 mm
Image size (pixels), 40 µm	550 x 775 pixels	600 x 1000 pixels	775 x 1025 pixels	675 x 1350 pixels
Image size, 40 µm	833 KB	1.17 MB	1.55 MB	1.78 MB
Image size (pixels), 64 µm	484 x 344 pixels	625 x 375 pixels	641 x 484 pixels	844 x 422 pixels
Image size, 64 µm	325 KB	458 KB	606 KB	695 KB

DIGORA® OPTIME

SOREDEX designs, develops, manufactures and markets dental imaging systems, with an emphasis on innovative digital solutions. Operating worldwide, SOREDEX offers quality imaging systems of true diagnostic value, based on an in-depth understanding of the dental practice. Applying three decades of experience of imaging excellence, we offer reliable and easy-to-use solutions that help you focus on patient care.

SOREDEX digital imaging systems are innovative and accurate diagostic tools that integrate seamlessly and easily into a dental practice, enhancing the imaging process and improving workflow. Our system are designed to be simple and easy to use. They will make your dental practice more efficient and ultimately give you more time for your patiens.

SOREDEX stands for innovation and value in dental x-ray technology.

Head Office and Factory:
SOREDEX
Nahkelantie 160, Tuusula
P.O. Box 148, FI-04301 Tuusula
Finland
Tel. +358 45 7882 2000
Fax +358 9 701 5261
info@soredex.com

Subsidiary, SOREDEX USA
300 W. Edgerton Ave.
Milwaukee, WI 53207 U.S.A.
Tel. +1 800 235 8854
Fax +1 414 481 8665
info@soredexusa.com

Subsidiary, SOREDEX Germany
Siemensstrasse 12
D-77694 Kehl
Germany
Tel. +49 7851 93 29 0
Fax +49 7851 93 29 30
kontakt@soredex.de

72063-1

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