ORTHOPHOS XG 5 DS/Ceph

ORTHOPHOS XG 5 –
Digital
panoramic X-ray
made simple.
Sirona – experience and innovation for the future of your practice.

*Our experience is your advantage!*

Every new product developed by Sirona is oriented toward the requirements of the future – perfecting digital, networkable dental imaging systems. The emphasis is placed on exceeding the desires and demands of our customers. This is expressed through the close cooperative effort between experienced dentists, universities and Sirona’s research and development division. Around 1,400 employees from Sirona on every continent of the world gather international experience in this way. This knowledge base flows consistently into the development of innovative products that give real added value to your practice.

*Expertise in X-ray imaging is your future!*

The roots of Sirona’s competence in the field of radiography go all the way back to Wilhelm Conrad Röntgen and his pioneering work in the early 1900s. Many innovative products made Siemens Dental the technological leader in the dental sector. And, since the transition to Sirona in 1997, we have consistently expanded on our leadership in the market. Through our experience in digital X-ray imaging worldwide we see the growing desire for a truly integrated concept and now more than ever, Sirona can make it a reality for many more practices.
ORTHOPHOS XG 5 completes the neXt Generation of X-ray systems.

The ORTHOPHOS XG family!
As a co-inventor of panoramic X-ray imaging and a pioneer of digital panoramic and cephalometric X-ray imaging, Sirona builds on the experience it has gained through the development and manufacture of over 40,000 systems to achieve the reliability and long service life offered by its current X-ray systems. This experience is supplemented in ORTHOPHOS XG systems with innovative functions to enhance diagnostic capabilities and productivity in your practice. In addition to the ORTHOPHOS XG 5 presented here, we also offer the XG+ with more diagnostic possibilities for specialized dentists and those who plan to specialize in the future and will need to be able to upgrade their equipment functionality at that time.

ORTHOPHOS XG 5!
The ORTHOPHOS XG 5 is designed as part of the neXt Generation family of Sirona X-ray products for dentists who would like to use state-of-the-art technologies to meet their most important requirements:

- Accurate and reliable X-ray images
- Simple operation
- Cost effectiveness
Ultra fast!
The power package features an integrated power PC, 16-bit image acquisition, a high-speed interface and CAN bus technology.

Future oriented!
The Ceph arm for digital cephalometry can be retrofitted later easily.
Intuitive!
The "Multipad" for easy system control

Networkable!
Ethernet technology allows control and image acquisition from any PC in the network

High quality!
Pan and Ceph sensors with CCD technology and 27 µm pixel size

Highly accurate!
3-point patient fixation to prevent motion blurring
ORTHOPHOS XG 5 –
High quality imaging made easy.

The basis for sharp images!
Panoramic X-ray imaging is a precise process. Only objects located within the focal trough are displayed sharply. The ORTHOPHOS XG 5 ensures this through:

- precise, immediate positioning of the anterior teeth in the sharply focused image layer without using an imprecise canine light localizer and
- effective and comfortable 3-point fixation to prevent patient movements during the exposure.

This provides the basis for good image quality.
The technology for really good images!

If the region of diagnostic interest is located in a defined image layer, it is important that this slice is clearly displayed. The innovative concept of the ORTHOPHOS XG 5 ensures this through:

**Specific programs for specific types of information**

- Panoramic programs using standard orthoradial beam projection or with constant magnification for measurement during implant planning.
- A genuine pediatric program (P10) with a radiation field that is reduced in width and in height to protect children’s eye lenses from inadvertent radiation.
- Temporomandibular joint program TM1, featuring a special orbit and a projection angle that coincides exactly with the axis of the temporomandibular joint (TMJ) creating a true lateral projection.

**Optimal technology for your practice**

- Compensation for the spinal column via automatic kV control generally results in a more detailed display of the anterior teeth.
- The CCD sensor has a pixel size of 27µm. 16-bit image acquisition and automatic preprocessing of raw image data ensure that a maximum amount of information is obtained before the exposure appears on the monitor.
- The numerous filter and analysis functions featured in SIDEXIS XG imaging software simplify diagnosis.
ORTHOPHOS XG 5 – with simple and logical operation.

**Reliable simplicity!**
Since imaging equipment is often used by different operators, the easier they are to operate the more reliable the results achieved with them will be. Sirona’s history of keeping things simple was the driving force in developing the ORTHOPHOS XG 5. The patient is positioned using only 2 light line markers to align the mid-sagittal and Frankfurt horizontal planes. And all system functions are controlled from the central control element, the Multipad.

**Easy adjustment of system settings!**
The control elements are clearly arranged on the “Multipad” to allow easy adjustment of the system in just a few steps:
- Pushbutton-controlled motorized adjustment of the height, forehead and temple supports;
- Program selection with automatic diaphragm change
- Selection of exposure parameters via intuitive patient symbols
Then release exposure.

**The programs for your practice:**
With its 8 individual programs, the ORTHOPHOS XG 5 offers you a truly diversified diagnostic spectrum. And each program has a specific orbital curve to deliver the best results for the corresponding task – just the way you need it for your diagnosis.
<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Standard panoramic radiograph with orthoradial projection</td>
</tr>
<tr>
<td>P1C</td>
<td>Standard panoramic radiograph in the 1 : 1.25x constant magnification version</td>
</tr>
<tr>
<td>P1L</td>
<td>Standard panoramic radiograph, half side left</td>
</tr>
<tr>
<td>P1R</td>
<td>Standard panoramic radiograph, half side right</td>
</tr>
<tr>
<td>P10</td>
<td>Pediatric panoramic radiograph with reduced height and length</td>
</tr>
<tr>
<td>TM1</td>
<td>Lateral temporomandibular joints in closed and open occlusion</td>
</tr>
<tr>
<td>S1</td>
<td>Sinus program, Display of the paranasal sinuses</td>
</tr>
<tr>
<td>TS1</td>
<td>Transverse multi-slice posterior teeth</td>
</tr>
</tbody>
</table>
Cephalometry with clarity!
The horizontal scanning sensor captures each portion of the image in just a fraction of a second. Maximum resolution is therefore attained with a minimum dose. An image width of 18 or 29 cm (7.09 or 11.42") is possible for lateral exposures. Patients measuring up to 1.90 m (6 ft. 2 in.) in height can thus be X-rayed standing.

The Ceph arm can also be retrofitted at a later date. If an optional second sensor is used, changeover between the Pan and the Ceph mode is possible without changing sensors.

All the Ceph programs you need: Lateral, PA/AP, Hand
This really pays off!
Digital radiography is becoming more widely accepted for many important reasons. These include: time savings, lower radiation dose, better practice organization and less physical space requirements (when you consider the elimination of the darkroom).
And digital radiography with Sirona offers you even more. It’s simpler, more logical and more productive:

- The ORTHOPHOS XG 5 can be connected directly to your practice network. Thus, you no longer require an additional PC. For you, this means more freedom and higher cost effectiveness.
- The SIDEXIS XG software interconnects all Sirona imaging systems (Pan, Ceph, intraoral X-ray and camera). This enables you to economically add new equipment in your practice and efficiently utilize the advantages of optimal workflow management.
- All Sirona intraoral sensor systems are available in a network-compatible version (X-ray wall box and X-ray box on the Sirona treatment centers) or as a USB system. This modular concept enables you to grow your digital practice when and how it suits your needs.
ORTHOPHOS XG 5 – tomorrow’s technology for your practice.

### Technical data
digital Pan/Ceph

<table>
<thead>
<tr>
<th>Radiation generator</th>
<th>Multipulse generator (max. 120 kHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-ray tube</td>
<td>SR 90/15 FN</td>
</tr>
<tr>
<td>Focal spot size</td>
<td>0.5 mm x 0.5 mm</td>
</tr>
<tr>
<td>Total filter</td>
<td>2.5 mm AL</td>
</tr>
<tr>
<td>Tube voltage</td>
<td>60–90 kV</td>
</tr>
<tr>
<td>Tube current</td>
<td>3–16 mA</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>230–240 V, 50–60 Hz</td>
</tr>
<tr>
<td>Nominal current</td>
<td>12 A</td>
</tr>
<tr>
<td>Line internal resistance</td>
<td>max. 0.8 ohms</td>
</tr>
<tr>
<td>Fuse</td>
<td>16 A slow-blow</td>
</tr>
<tr>
<td>Power consumption</td>
<td>2.8 kW</td>
</tr>
<tr>
<td>Permissible line voltage fluctuations</td>
<td>± 10 %</td>
</tr>
<tr>
<td>Panoramic exposure time (P1)</td>
<td>14.2 s</td>
</tr>
<tr>
<td>Bite block height range</td>
<td>2’8” to 6” (80–1810 mm)</td>
</tr>
<tr>
<td>Radiation time 18 x 24 cm</td>
<td>9.4 s</td>
</tr>
<tr>
<td>Effective exposure time</td>
<td>approx. 270 ms</td>
</tr>
</tbody>
</table>

### ORTHOPHOS XG 5 DS

- Multipulse generator (max. 120 kHz)
- SR 90/15 FN
- 0.5 mm x 0.5 mm
- 2.5 mm AL
- 60–90 kV
- 3–16 mA
- 230–240 V, 50–60 Hz
- 12 A
- max. 0.8 ohms
- 16 A slow-blow
- 2.8 kW
- ± 10 %
- 14.2 s
- 2’8” to 6” (80–1810 mm)
- 9.4 s
- approx. 270 ms

### ORTHOPHOS XG 5 DS Ceph

- Multipulse generator (max. 120 kHz)
- SR 90/15 FN
- 0.5 mm x 0.5 mm
- 2.5 mm AL
- 60–90 kV
- 3–16 mA
- 230–240 V, 50–60 Hz
- 12 A
- max. 0.8 ohms
- 16 A slow-blow
- 2.8 kW
- ± 10 %
- 14.2 s
- 2’8” to 6” (80–1810 mm)
- 9.4 s
- approx. 270 ms

### Programs

#### Panoramic programs:
- Standard panoramic selectable in the versions
- Standard orthoradial full dentition (P1)
- Standard orthoradial left (P1L)
- Standard orthoradial right (P1R)
- with constant 1.25x magnification (P1C)
- Pediatric panoramic (P10)

#### Sinus program:
- Paranasal sinuses (S1)

#### Transverse multislice posterior teeth (S1)

#### Ceph programs:
- Ceph asymmetrical
- Ceph symmetrical p.a.
- Ceph symmetrical a.p.
- Carpus (Hand/Wrist)

#### Lateral temporomandibular (TMJ) program:
- with open and closed occlusion (TM1)

### Technical features

- Centralized control via “Multipad”
- Optional remote control
- 90 kV high-frequency generator
- Spinal column compensation via automatic kV increase
- CCD sensor technology with high-speed interface, 27 µm pixel size and image acquisition with 16-bit technology, 100 Mbit Ethernet data transmission
- State-of-the-art data technology via integrated power PC and can bus architecture
- Upgradeable system software
- Ceph is upgradeable
- Combination of Pan/Ceph sensors are available as an option
- System versions: ORTHOPHOS XG 5 DS, ORTHOPHOS XG 5 DS Ceph
- SIDEXIS XG image processing software
- Optional floor stand
- Suitable for patients in wheelchairs

### Remote control

With display of exposure parameters.

### Sturdy floor stand!

If no walls are available for fastening your panoramic X-ray unit, Sirona also offers an optional floor stand for the ORTHOPHOS XG 5 which can be screwed to the floor and can accommodate patients in wheelchairs.

### Two sensor versions

- Pan
- Ceph

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Do you need extended diagnostic possibilities?
Then be sure to ask your nearest Sirona dealer about ORTHOPHOS XGPlus – the panoramic X-ray system that meets your highest demands for differentiated diagnosis and safety.

ORTHOPHOS XGPlus –
Digital Imaging Perfection.

ORTHOPHOS XG™ – Digital Imaging with confidence:

Reliable Diagnosis
- Intuitive program structure
- Extended diagnostic possibilities (e.g. transverse slices)
- Individual adaptation to the patient

Operational Simplicity
- Efficient patient positioning
- Intuitive control and interactive messages via the Easypad colour touchscreen
- Preview image of X-ray exposure displayed on the unit

Investment security
- Practice-proven optimal workflow
- Quickshot mode for Pan and Ceph
- Future Software and operational upgrades
Logical. You are right to expect a great deal from the world’s only full-range supplier of dental equipment—in particular, an extensive product portfolio, first class service, outstanding quality and tremendous value for money. Sirona covers the entire dental equipment spectrum: treatment centres, handpieces, X-ray systems, hygiene systems, imaging systems and—last but not least—CEREC ceramic restoration systems. Building products that stand the test of time, Sirona is the professional partner for the dental profession.