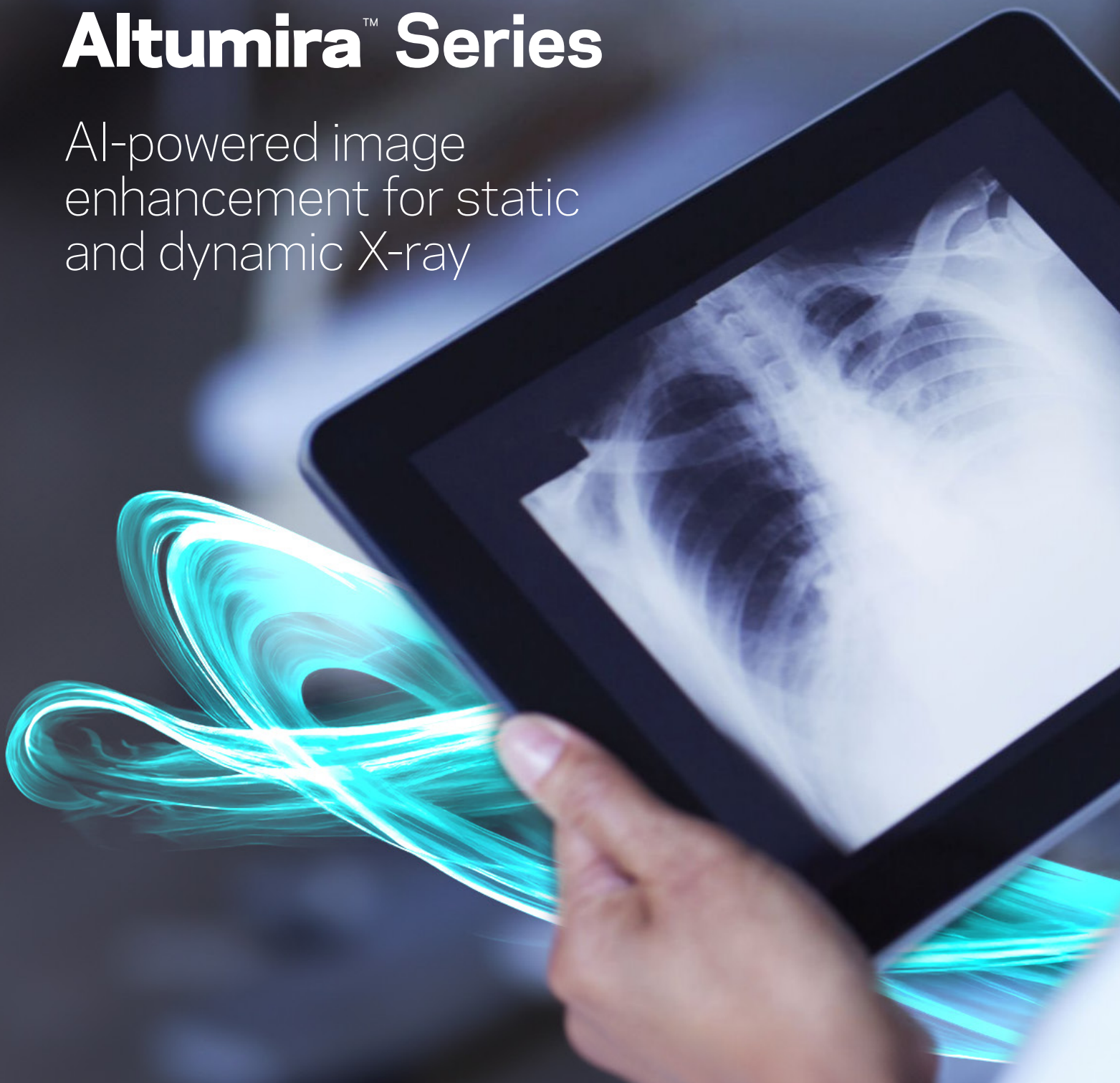
ContextVision

DIGITAL RADIOGRAPHY

Altumira™ Series

AI-powered image enhancement for static and dynamic X-ray



AI-powered image enhancement

The ContextVision product portfolio provides **state-of-the-art software solutions** for optimized image quality, dose and workflow.

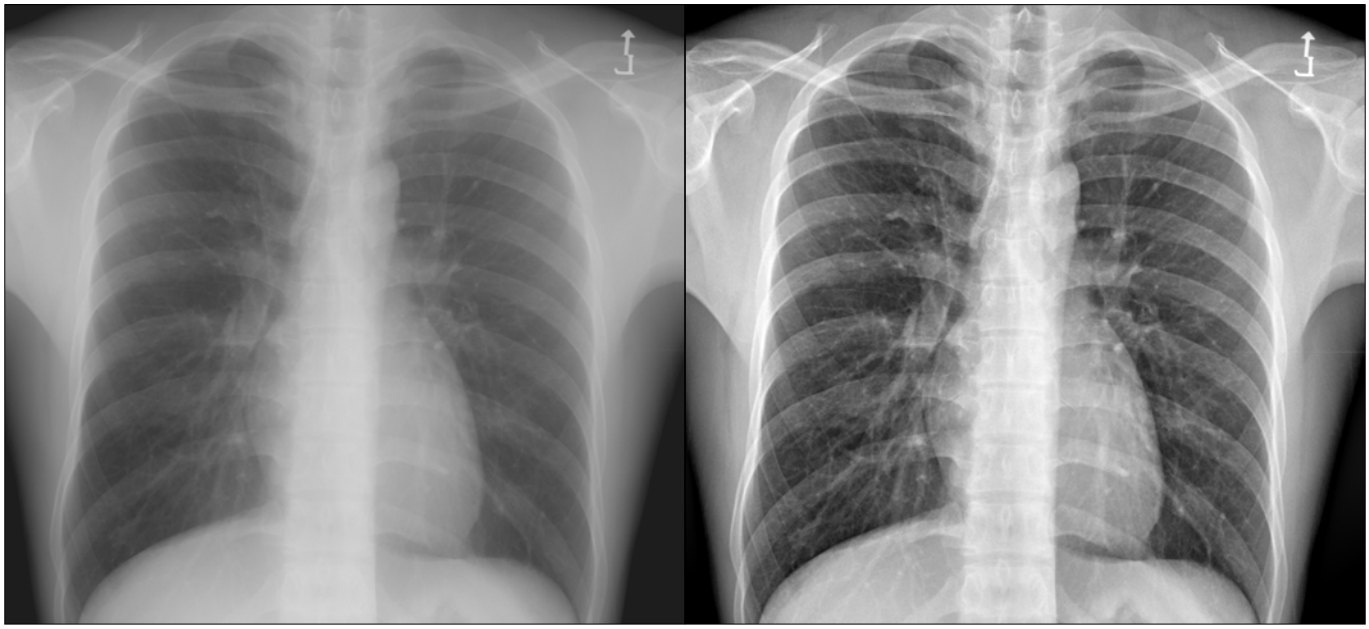
Our image enhancement solution for digital radiography enables excellent image quality and robustness in daily use. Its high flexibility allows system manufacturers to easily meet a wide variety of image quality preferences. The product can be optimized for all anatomies and projections.

ALTUMIRA SERIES

Altumira™

Superior image quality for digital radiography

Our AI-powered image enhancement solution for radiography is a synthesis of ContextVision's world-leading image enhancement technology and the latest findings within deep learning. The Altumira platform is designed for all digital radiography systems for static applications.



UNPROCESSED

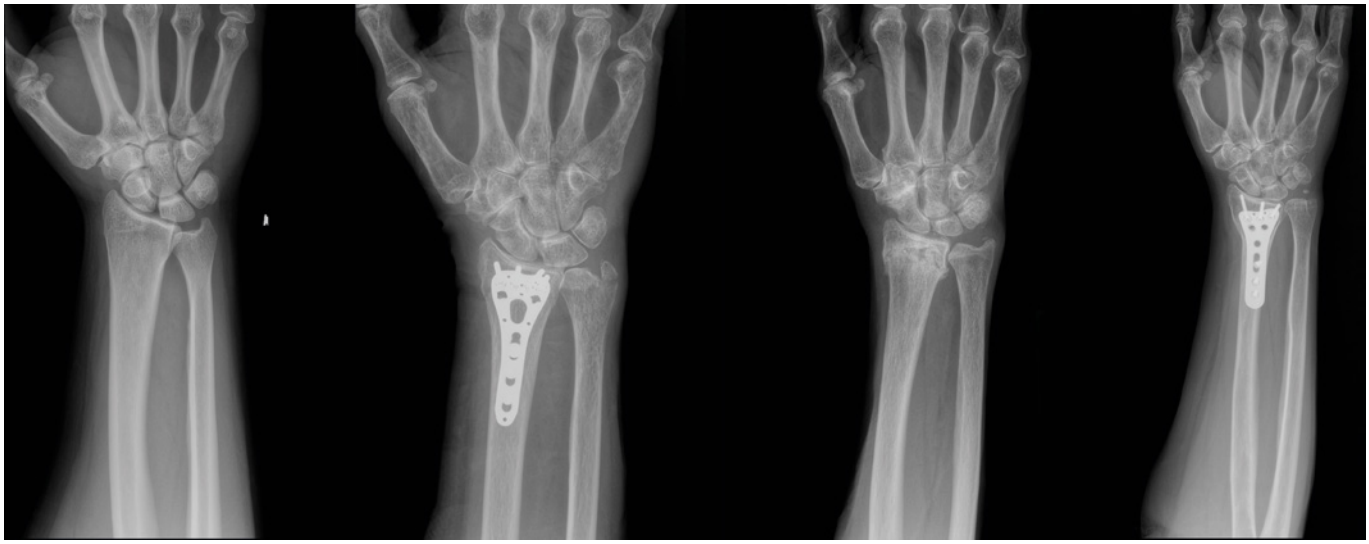
PROCESSED WITH ALTUMIRA

Features & benefits

Stable and consistent image quality for all patients and clinical applications, enabled by deep learning technology.

- ✓ Sophisticated adaptive algorithms analyze every pixel to optimize the contextual enhancement.
- ✓ Noise suppression with simultaneous edge and contrast enhancement enables great visibility in soft and dense tissue.
- ✓ Advanced grayscale adaption based on deep learning technology for optimized global and local contrast.
- ✓ Addresses all types of variations in exposure conditions e.g. patient size, dose and intensity levels.
- ✓ Excellent robustness supports an efficient workflow and a high patient throughput.

Robustness between patients and varying exposure conditions.

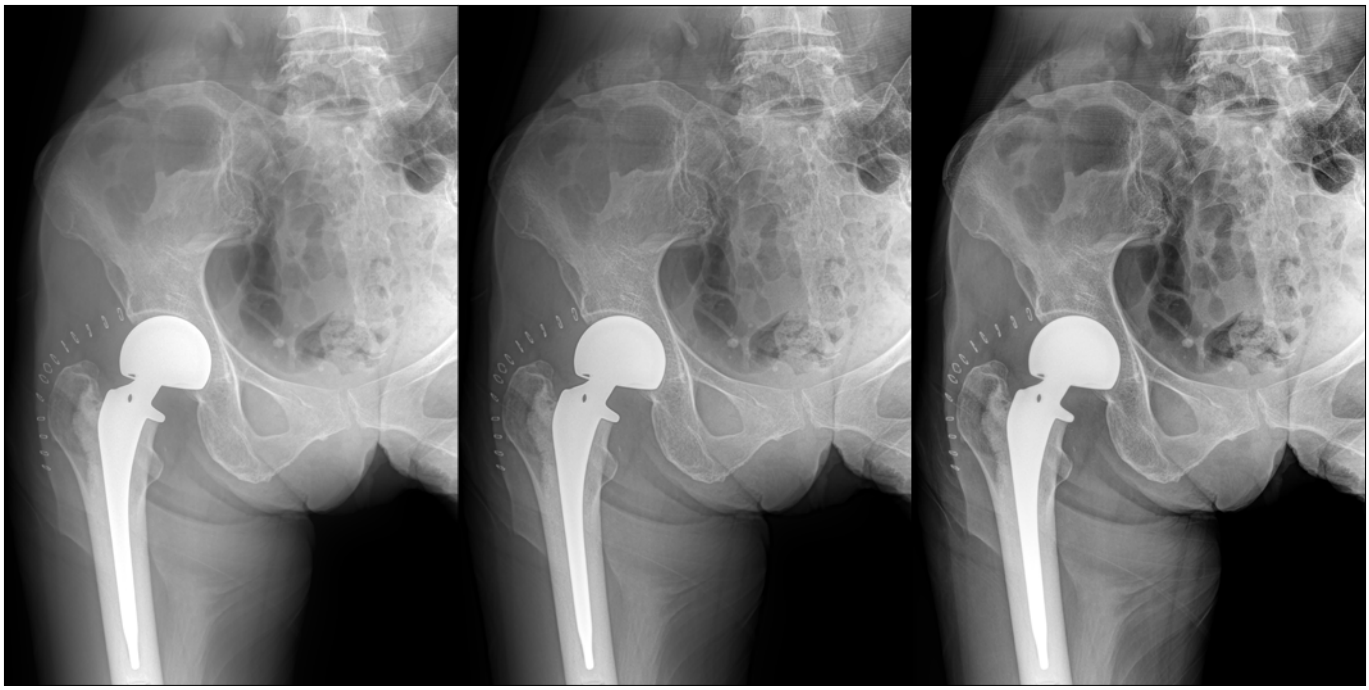


PROCESSED WITH ALTUMIRA

STANDARD PROCESSING

Customizable image appearances for varying user preferences

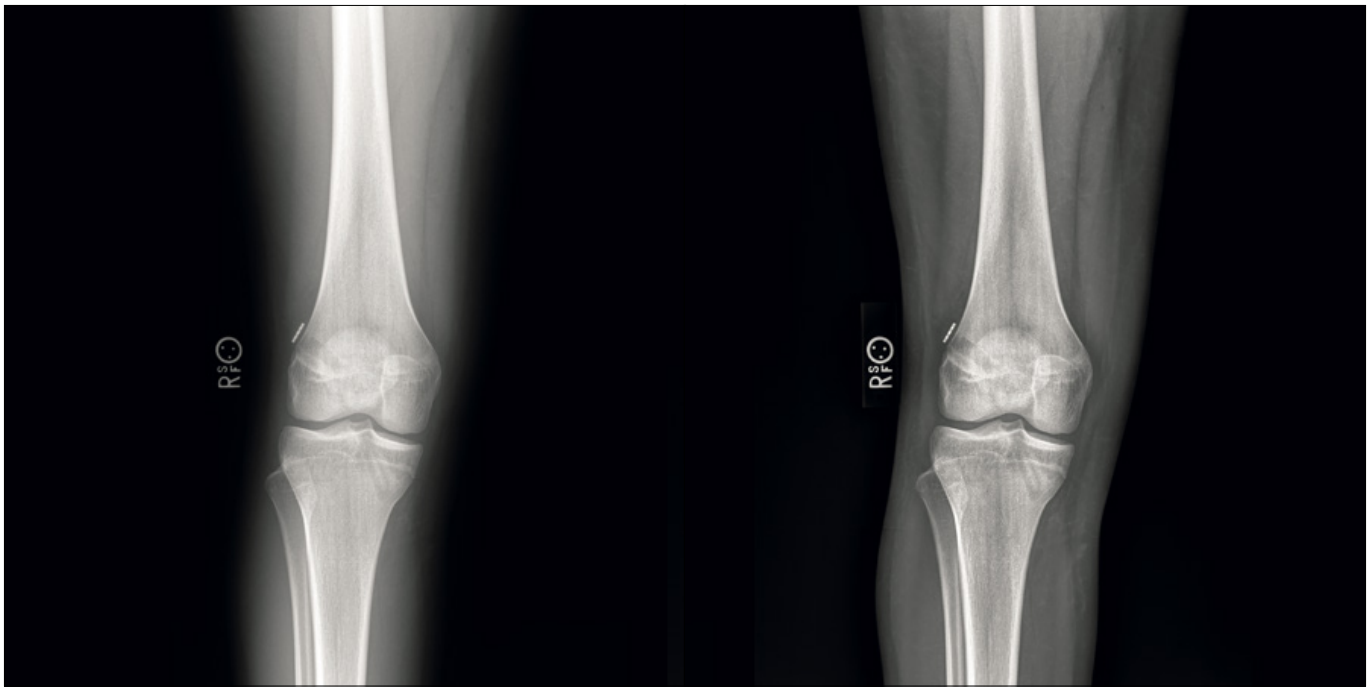
The superior dynamics of Altumira allow DR manufacturers to easily meet the wide variety of clinicians' image appearance preferences. Altumira provides solutions with excellent visibility of tissue adjacent to implants.



THREE DIFFERENT EXAMPLES OF IMAGE APPEARANCES, CREATED FROM THE SAME RAW IMAGE

Altumira enables **excellent white bone** visibility

Altumira's customization possibilities enable excellent white bone visibility and address the specific requirements of both pre- and post-operative orthopedic imaging.



TWO EXAMPLES PROCESSED WITH ALTUMIRA FOR A WHITE BONE (LEFT) AND A RADIOGRAPHIC APPEARANCE (RIGHT)

Altumira enables excellent white bone visibility.

ALTUMIRA SERIES

Altumira™ Plus

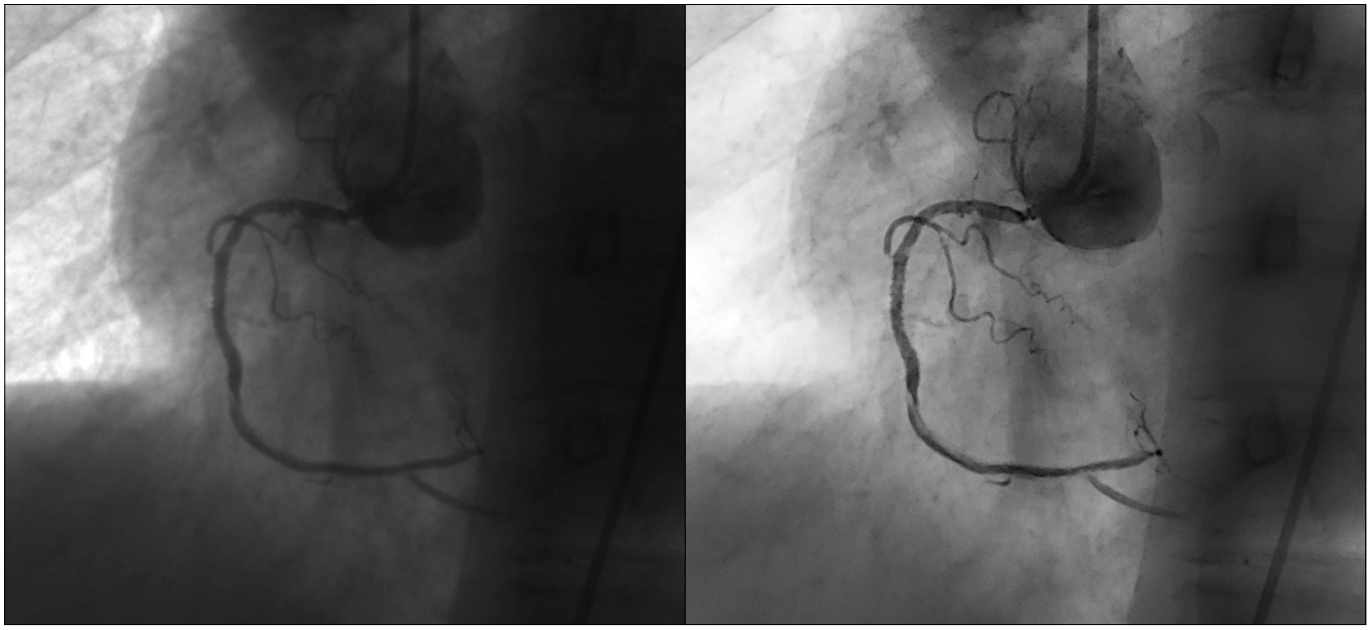
AI-powered image enhancement for dynamic imaging with **unparalleled image quality.**

Harmonized and stable intensity levels in a dynamic test with different exposures and fields of view.

Altumira Plus provides excellent, stable and robust image quality for both static and dynamic imaging.

Features & benefits

- Efficient contrast and edge enhancement, combined with noise suppression, provide clear visibility of fine details such as stents, catheter tips and fine vessels.
- Advanced temporal filter with motion compensation reduces noise without temporal blurring or motion artifacts.
- Allows for lower dose with maintained high image quality.
- Stable and robust image quality throughout all types of variations in dynamic imaging.
- Altumira Plus is independent of variations in field size, placement of patient, organs in motion, etc.
- The harmonized intensity levels and robustness is enabled by deep learning technology.



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PROCESSED WITH ALTUMIRA PLUS

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PROCESSED WITH ALTUMIRA PLUS

ALTUMIRA SERIES

Add-ons

The add-ons enhance the functionality of the Altumira products with a range of powerful tools, innovative solutions and specialized features.

Whether you're looking for increased efficiency, expanded capabilities, or tailored solutions to meet your unique needs, our add-ons provide flexible options to optimize your experience and boost performance.

Scatter correction

Altumira features AI-powered scatter correction functionality, for exceptional quality in images acquired without a physical grid. The scatter correction feature offers flexible and efficient control of contrast, detail and noise. No initial calibration is required and it works with all X-ray systems and detectors. This in turn enables improved workflow, enhanced efficiency, and a lower X-ray dose compared to images acquired with a grid.

WITHOUT ALTUMIRA SCATTER CORRECTION

WITH ALTUMIRA SCATTER CORRECTION

Smart noise reduction

Smart noise reduction offers a comprehensive set of adaptive noise reduction algorithms tailored for diverse X-ray applications and platforms. Leveraging advanced AI solutions alongside statistical image analysis, Smart NR ensures precise and efficient noise reduction for a wide range of imaging needs. This add-on optimizes performance across both real-time and static environments to meet varying processing demands.

ALTUMIRA

ALTUMIRA SMART NOISE REDUCTION

Exposure index

- ✓ Enables automatic dose monitoring
- ✓ Ensuring correct patient exposure for each anatomy and projection
- ✓ Based on deep learning technology for Altumira
- ✓ Delivers the object mean or median value

Doctor's interface

Allows the manufacturers to create a graphical user interface for end users to optimize image features on each individual unit in the field.

Tuning interface

Allows the manufacturers more flexibility than Doctor's interface in fine-tuning image parameter files. Intended for OEM Application Specialists performing in-the-field customization of image quality.

Tuning tool

A stand-alone tuning tool with an advanced graphical interface allows the manufacturers to optimize image features and generate new system settings. The new settings can be distributed to the field after completion.

	Doctor's interface	Tuning interface	Tuning tool
Graphical User Interface (GUI)	—	—	✓
Parameters	5	11	11
Optimization location	In-field	In-field	In-house
Recommended user	End users; OEM Application Specialist	Service Engineer OEM Application Specialist	OEM R&D In-house Application Specialist

Building **strong** partnerships

We offer you more than 40 years of experience in medical imaging through state-of-the-art image enhancement software and professional support.

With a versatile and configurable design, Context-Vision's products can be customized to all needs regarding clinical applications and customer preferences.

All ContextVision products are designed for seamless integration. The products are delivered as an SDK containing a .dll file together with parameter files (XML files). The parameter files control the settings of the image features of the algorithms.

With our continuous development and innovative technology, a partnership with ContextVision offers you a leading position in radiography – today and tomorrow.

Contact ContextVision for more information about the best solution for your needs and visit our website at www.contextvision.com.

ContextVision's products are customized and optimized for each client by our highly experienced application engineers.

ContextVision

ContextVision is a medical technology software company specialized in image analysis and artificial intelligence. As the global market leader within image enhancement, we are a trusted partner to leading manufacturers of ultrasound, X-ray and MRI equipment around the world.

Our expertise is to develop powerful software products, based on proprietary technology and artificial intelligence for image-based applications. Our cutting-edge technology helps clinicians accurately interpret medical images, a crucial foundation for better diagnosis and treatment.

The company, established in 1983, is based in Sweden with local representation in the U.S., Japan, China and Korea. ContextVision is listed on the Oslo Stock Exchange under the ticker CONTX.

For more information, please visit www.contextvision.com →

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