

Innova 2100^{IQ}, 3100^{IQ}, 4100^{IQ}, 2121^{IQ}, and 3131^{IQ} Interventional Imaging X-ray Systems

Fact Sheet

What challenges do Innova X-ray systems address and what solutions do they create?

As interventional procedures grow in complexity and length, exposure to radiation dose is a growing concern for physicians and patients. GE Healthcare understands this concern and has developed the capability to manage, customize, and personalize radiation dose for each individual patient and procedure.

GE Innova systems minimize radiation exposure while maintaining state-of-the-art image quality in interventional imaging to promote the quality of patient care.

How does Innova's radiation dose personalization work?

In any system, it's essential to maximize the efficiency of the X-rays that penetrate the patient and hit the detector, in order to keep patient and physician dose to a minimum. Innova X-ray systems offer exclusive advanced technologies, features, and control to effectively deliver the best required image quality at the lowest reasonably achievable dose—the ultimate goal of any dose management program and essential to effective dose personalization.

Innova's flat panel detector provides the industry's highest Detective Quantum Efficiency, or DQE. DQE has been internationally accepted by the medical imaging physics community as the best index of detector performance in the contrast- and



GE imagination at work

an innovation of
healthymagination

dose-limited imaging done in actual clinical studies. High DQE enables a system to provide a better image at the same dose, or the same image at a lower dose. In short, the higher the DQE is, the higher the imaging at a given achievable dose.

Innova's dose-efficient technology is regulated by AutoEx™, a GE-exclusive control system that adapts on the fly—automatically and continuously—to keep image quality and patient dose at optimum levels. AutoEx automatically establishes the initial technique setting and regulates all imaging parameters to deliver the best possible image for the dose used. AutoExposure Preference Settings allow physicians to personalize the Innova to the image quality and dose levels required.

How does Innova's radiation dose personalization increase access and improve care?

Increased access: GE's dose personalization technology is implemented on all Innova systems shipping worldwide. As a result, dose customization and personalization are available to millions of patients globally.

Improved care: Thanks to Innova's high dose efficiency, dose can be tailored for each patient and procedure. The result: dose efficiency and optimization for each patient's needs or each procedure's complexity—without compromising image quality.

Several other Innova dose-reduction technology features further extend dose efficiency:

- **InnovaSense™** patient contouring automatically minimizes the detector-to-patient distance for fast positioning, ideal image geometry, and less radiation exposure.
- **Dynamic Range Management** virtually eliminates blackout and burnout without using contour filters, ensuring crisp, clean images on every procedure to potentially reduce retakes and the associated dose.
- **Innova Fluorostore** allows lower-dose fluoroscopic loops to be recorded and stored for patient records, reducing the need for higher-dose image sequences.

About healthymagination

GE's "healthymagination" is about better health for more people.

We've committed \$6 billion to continuously develop innovations that help clinicians and healthcare providers deliver high-quality healthcare at lower cost to more people around the world.

For more information about our healthymagination commitment, visit www.ge.com/healthymagination.

GE Healthcare
Chalfont St. Giles
Buckinghamshire
UK

www.gehealthcare.com



GE imagination at work

©2010 General Electric Company – All rights reserved.

General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation.

GE, GE Monogram, AutoEx, Innova, InnovaSense, and imagination at work are trademarks of General Electric Company.

GE Healthcare, a division of General Electric Company.