

RADspeed Installation Milestone: 10,000 Units in 10 Years



Shimadzu, world-wide manufacturer of diagnostic imaging equipment, has installed over 10,000 units of its general radiographic system series RADspeed, since being introduced in 2004. The newly released RADspeed Pro V4 is a leading-edge DR system. It meets the needs of reduced exposure levels, more accurate positioning and flexible examination which are highly sought after by patients and medical staff alike. KLAS Research, a healthcare research firm in the United States, has ranked the DR series in first place in the category of general radiography "digital X-ray" systems.

As a basic form of examination, general radiography still accounts for 70 percent of image diagnosis. At large medical facilities, a variety of imaging procedures is required continuously, including chest radiography, abdominal radiography, and radiography in the orthopedic field. As a result, there is a strong demand for imaging systems that can improve patient throughput.

RADspeed Pro V4 covers outstanding features represented through the V4 tag for Various, Versatile, Visible and Value:

- Various FPD line-ups
In order to meet customers' needs, RADspeed Pro V4 provides a flexible configuration with various FPD (Flat Panel Detector) line-ups, wired or wireless
- Versatile outcome
Based on the FPD system configuration expected by the customers, versatile solutions are guaranteed
- Visible information
The new digital "all-in-one console" provides visible information to easily set protocols (X-ray parameters, image processing parameters, storage destination etc.) and check preview images on various displays
- Value for life
The RADspeed Pro V4 modular system is based on the latest technology with certified quality management.

Enhanced operability supports high-throughput examinations

This system provides integrated control of the X-ray high voltage generator, the X-ray tube support, the DR system, the bucky stand and the bucky table. Thanks to an integrated console that combines the console for the X-ray high voltage generator and the control unit for the DR system, radiography conditions and image processing parameters can be managed together as a radiography protocol. Touch panels make the RADspeed Pro V4 system easier to use.

The same patient information and image exam information are displayed on the console, the control unit for the ceiling-mounted X-ray tube support and on the data display monitor (option), which support an efficient workflow. These components can also be used for a near-patient changing of the anatomical programs.

Flexible FPDs, a wealth of image processing, and auto-stitching

The combination of the high-performance 17 x 17 inch fixed FPD and the 14 x 17 inch portable FPD (wired/wireless) create a flexible system configuration to accommodate all sorts of radiography. The DR system supports full use of the capability of the FPD and is equipped with a wealth of image processing functions enabling the instant check of images with the imaging quality adjusted. Furthermore, large long-view examinations of the patient, like full spine and full leg exams, can be taken with auto stitching radiography, an application enhancing the clinical

value of high-definition FPDs to further extend the range of operation.

Arrangements for X-ray dosage reduction

The system is equipped with a removable grid mechanism to limit exposure radiation, so that the dosage can be significantly reduced especially during pediatric radiography. Also, an additional copper filter to remove soft X-rays can automatically be selected in conjunction with the radiography protocol. Further, smooth operability leads to shorter examinations, which reduces the burden on patients.

Efficient preparation of examinations

Particularly RADspeed Pro V4's features enabling efficient preparation of examinations are highly appreciated by the users, such as:

- the automatic long imaging feature available in combination with various FPDs (auto-stitching);
- the auto-positioning feature interlocked with the anatomical program that automatically sets the position of the ceiling-traversing overhead X-ray tube support with the single pressing of a button; and
- collimator functionality offering the possibility to select the filter according to the region being imaged. The imaging menu enables appropriate and efficient imaging while minimizing unnecessary exposure.

Source and image credit: Shimadzu

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