Image Intelligence® Inside

Image Intelligence defines Fuji's rich 70-year history and expertise in providing superior image content, appearance and display. It is with this knowledge that Fujifilm has developed an advanced set of tools, known as Image Expression Technologies, which improve diagnostic content and certainty; and Diagnostic Support Technologies, which enhance image appearance for display. Fujifilm's advanced image processing produces world-class image quality that is the direct result of Fujifilm’s years of experience in refining images for interpretation and display. Image Intelligence means that the first-up appearance of the image is the correct one — technologists do not waste valuable time trying to make images look good because they are already appropriate and optimized for that procedure.

Examples of Fuji’s patented image processing tools include:

- EDR (Exposure Data Recognizer) uses advanced neural networking logic to automatically detect the useful image information captured by the IP. Collimated areas and areas outside the imaged object are ignored to ideally present the diagnostic information.
- DRC (Dynamic Range Control) improves visibility of both dense and peripheral tissue by adjusting density and contrast characteristics.
- MFP (Multi-objective Frequency Processing) applies edge enhancement selectively to both small and large structures within an image.
- GPR (Grid Pattern Removal) prevents display of a moiré pattern caused by a stationary grid.
- FNC (Flexible Noise Control) extracts noise data and suppresses noise levels in images without losing diagnostic information from the image.

FCR XG5000 Specifications

Standard Components:
XG5000 high capacity Image Reader (CR-IR 362)
Choice of Flash Lite IP console or Flash Plus IP console

Supplies:
Imaging Plate Cassette Type C
14” x 17” (35 x 43cm), 14” x 14” (35 x 35cm), 10” x 12”, 8” x 10”, 24 x 30cm, 18 x 24cm
Imaging Plate ST-V
Standard type: 14” x 17” (35 x 43cm), 14” x 14” (35 x 35cm), 10” x 12”, 8” x 10”, 24 x 30cm, 18 x 24cm
HR-V (high resolution type): 24 x 30cm, 18 x 24cm

Processing Capacity (High Resolution 10 pixel/mm):
14” x 17” (35 x 43cm) 103 IPs/hour
14” x 14” (35 x 35cm) 120 IPs/hour
10” x 12” 128 IPs/hour
8” x 10” 165 IPs/hour
24 x 30cm (ST) 128 IPs/hour
24 x 30cm (HR) 90 IPs/hour
18 x 24cm (ST) 110 IPs/hour
18 x 24cm (HR) 110 IPs/hour

Reading Gray Scale: 12 bit

Network:
10 Base T/100 Base T
Dimensions (W x D x H):
26” x 29” x 58” (665 x 740 x 1480mm)
Weight:
628 lbs. (285kg)

Power Supply Conditions:
Single phase 50~60Hz
120-240V±10%
7A (max)

Environmental Conditions:
Operating Conditions:
Temperature: 15~30° C
Humidity: 40~80%RH (No dew condensation)
Non-operating Conditions:
Temperature: 0~45° C
Humidity: 10~90%RH (No dew condensation)

Dimensions:

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FCR Expertise

When you select a Fuji Computed Radiography (FCR) system, you can count on getting the cutting edge of technology. All of our readers are the result of sophisticated mechanical engineering, superior optical technology and refined image processing software tools. Plus thousands of FCR clinical users are included in the design process, making FCR systems as easy to use as possible to operate as possible. When you go with the trusted market leader, you get a combination of expertise that no other digital imaging system can bring you. It’s the FCR difference!

Introducing... the XG5000

Investments in technology and clinical feedback are essential to product improvements and an optimal user experience. The XG5000 reader was designed to exceed expectations even for the highest volume environments and provide surplus capacity during peak periods. With a throughput of up to 165 Imaging Plates (IPs)/hour, the XG5000 is the fastest system available. The XG5000 four-cassette stacker and product design allow IPs to be read and erased simultaneously for image preview in as little as 15 seconds and cycle time as short as 30 seconds. And the XG5000 is not just fast, it produces consistently high quality images without manipulation to optimize your clinical workflow. Fujifilm recognizes that these features are basic requirements for efficient radiological environments.

What makes the XG5000 different from other multi-plate systems?

The XG5000 can read and erase a storage-phosphor IP more efficiently than any CR reader available. And the IP, which was developed to be flexible while maintaining durability, is key to maintaining the reader’s compact size, superior imaging and quick cycle time. Fuji is known for its core competencies in chemical engineering and imaging physics, which are responsible for many of the advantages the FCR XG5000 has over other systems. The FCR XG5000’s four cassette slots exceed cycle times and throughput of competitive CR readers. In addition, experience and feedback from customers indicated that having individual cassette drivers, with no single point of failure, provided better reliability. In the event of a cassette jam in one slot, you have three other slots that will continue to work for you. With competitive designs, using a bin having only one entry point for cassettes, a jam will bring all imaging to a halt.

The Flash IIP Console: Simplified User Interface

A CR system’s ease of use is critical to optimizing efficiency. The Flash IIP console workstation is the user interface to the XG5000 and it is the key to enhancing technologist workflow. Designed for patient identification, image review and image optimization, the Flash IIP integrates these multiple functions into one compact workstation. The simplified user interface automates processes to decrease errors and reduce the number of steps required to produce images – meaning examinations are completed more quickly and patients spend less time in the waiting room. The minimal space requirements allow in-room installation and offer the most flexibility for placement. Multiple Flash IIP consoles can be networked to communicate with all of the FCR readers in the department, improving flexibility and reducing potential workflow bottlenecks.

The FCR difference

The Highest Productivity

System throughput is a critical component of productivity and with Fuji CR, there are no compromises. Implementing a system that maximizes workflow efficiency is the result of multiple factors working together seamlessly.

Ease of Use

Can make or break workflow efficiency. Fujifilm has simplified the design of the Flash IIP interface to the point where an exam can be processed in as few as three taps to the monitor. An annotation marker can be added to the image with one tap to the screen. Technologists can type free-text comments to the radiologist. And images can be transmitted automatically, without user intervention.

Appropriateness of the Exam

Is key to minimizing the amount of time that a technologist needs to spend optimizing an exam for display. Fuji’s expansive set of image processing algorithms and Image Intelligence™ processing tools make the first-up display the right one. With FCR, image processing tools are applied automatically, so that additional reprocessing is not required. FCR users are not wasting valuable time trying to make images look appropriate before transmission.

Training and Support

Gives FCR users the tools needed to maximize the utility of the system. Fuji’s seasoned Professional Services team will work with new users to help redesign the department work patterns for the greatest efficiency. The same dedicated and experienced team assures comprehensive staff training and that the transition to digital imaging is as streamlined as possible. In providing advanced training to a designated “super user”, each facility has an on-site expert to quickly troubleshoot issues that may arise.

Technology Innovation

Exploiting the capabilities of digital x-ray and integrating that new technology into high quality products is the direct result of a commitment to Research & Development. Fujifilm Medical Systems introduced Computed Radiography to the world more than 20 years ago and continues to provide the most technically superior digital x-ray products in the world. The FCR product line continues to evolve with improved functionality, enhanced image quality and advanced features that are several generations ahead of competitive offerings. The XG5000 is a good example of this commitment. It features superior throughput, compact size and the optimal design for a high capacity environment. You can count on Fujifilm Medical Systems to be best positioned to provide the superior digital x-ray solution today and tomorrow.

Professional Services

Fujifilm Medical Systems will not only provide you with the best technology, but will support our state-of-the-art products with a knowledgeable Professional Services team that will manage your transition to a digital domain. Fujifilm recognizes that critical to a successful integration and the ongoing success of your digital x-ray investment is a group of dedicated professionals who will help manage this process. It means that staff is trained completely, equipment is used to its full potential and image processing is refined for your preferred first-up image display – all saving time and money for your organization.

Fujifilm’s Service Professionals are factory-trained and dedicated to supporting the Fujifilm product line: thus they are experienced and have a wealth of resources to draw upon, if needed. Additionally, Fujifilm sponsors advanced training programs for clinical and biomedical professionals. Fujifilm shares its knowledge with FCR users, making adoption of digital x-ray as seamless as possible. Nobody has more experience in transitioning customers to digital.