

**FUJIFILM**



## ***Fujifilm Digital Mammography System***

*Digital breast imaging with superior quality and reliability.*

**FCR, the world's first CR to receive PMA<sup>\*1</sup> approval from FDA<sup>\*2</sup> for mammography.**

\*1: PMA (Premarket Approval) \*2: FDA (U.S. Food and Drug Administration)



"Image Intelligence™" is a set of sophisticated digital image-processing software technologies that are incorporated in the products of the Fujifilm Digital Mammography System.

# Fujifilm's Digital Mammography System: Your digital mammography solution

Fujifilm's Digital Mammography System uses advanced technologies to enhance opportunities for early detection of breast cancer. The convenient, easy-to-use system expedites workflow with automatic image routing and background image processing featured in the FCR PROTECT CS and PROTECT ONE reader. Touch-panel accessibility and intuitive software enable the CR Console to facilitate data confirmation and networking versatility.

Printing of high-quality actual-size images is fast and accurate with DRYPIX 7000 and DRYPIX 4000 dry imager.

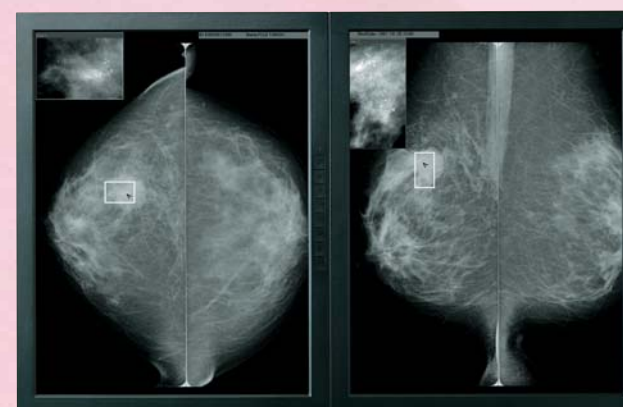
And linking the FCR reader via CR Console to the CAD Mammography Workstation greatly expands image viewing capacity.

Fujifilm's Digital Mammography System benefits operator and patient alike with more sensitive detection and superior diagnostic capability.

## IMAGE ACQUISITION



## IMAGE DISPLAY AND PROCESSING



## IMAGE OUTPUT



### FCR PROTECT ONE

Compact design with 1-cassette stacker promising superb resolution for mammography, as well as pediatric and neonatal radiography. Delivering seamless and smooth workflow with superior operability.

### FCR PROTECT CS

A next-generation FCR reader offering image quality optimized to satisfy the most demanding applications. Features like processing capacity sufficient to cover multiple mammography rooms and 4-cassette stacker increase workflow efficiency and enhance departmental productivity.

### CR Console

A multi-function console that allows quality assurance activities, image processing, as well as all the complex procedures of digital X-ray imaging – patient ID, image preview, processing and printing, DICOM interface, etc. – at a single workstation.

#### P.E.M.

Specifically developed for mammographic imaging, Pattern Enhancement Processing for Mammography software greatly facilitates identification of tumors while improving the conspicuity of micro-calcifications.

### CAD (Computer-Aided Detection system) Mammography Workstation

Link the FCR reader via CR Console to Mammography Workstation MV-SR 657 for full viewing capability. After primary image QA at the CR Console, images are transferred to the viewing station, which automatically marks and magnifies any area that may be associated with breast cancer. User-friendly, software design and high-resolution display monitor in dual-portrait mode maximize all-round performance.

### DRYPIX 4000

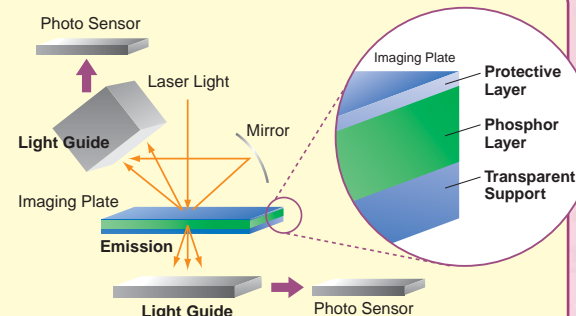
Ideal imager for medium-size hospitals, combining proven reliability and convenience with ability to print 50-micron resolution and 3.6 D-max, all in a compact body. Suitable for mobile imaging facilities.

### DRYPIX 7000

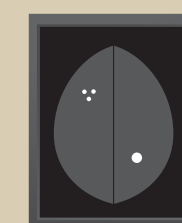
The flagship of the DRYPIX series, DRYPIX 7000's ability to print 50-micron resolution and automatic adjustment to 3.6 D-max produces image quality ideally suited for mammography printing.

#### Dual-Side Reading Technology

Dual-Side IP (Imaging Plate) Reading technology allows the use of a thicker phosphor layer on the IP and transparent base, thereby increasing DQE (Detective Quantum Efficiency) by collecting the emissions from both sides of the IP with optimal, spatial frequency-dependent factors.

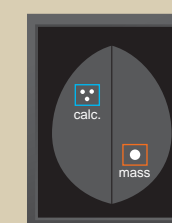


#### Reading Support Capabilities



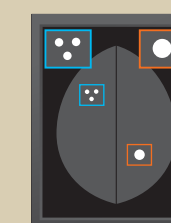
##### Screen A

Micro-calcification and/or mass candidates have been enhanced through special image processing.



##### Screen B

Markers are placed on the regions for highlighting.



##### Screen C

Regions marked are magnified for easier reference.

# Fujifilm Digital Mammography System Specifications

	FUJIFILM FCR PROPECT ONE	FUJIFILM FCR PROPECT CS
<b>Standard Components:</b>	<ul style="list-style-type: none"> <li>FCR PROPECT ONE Image Reader (Model: CR-IR 368)</li> <li>AC power cord</li> <li>CR Console Plus (sold separately)</li> </ul>	<ul style="list-style-type: none"> <li>FCR PROPECT CS Image Reader (Model: CR-IR 363)</li> <li>AC power cord</li> <li>CR Console Plus (sold separately)</li> </ul>
<b>Imaging Plate and Cassette:</b>	Imaging Plate: <ul style="list-style-type: none"> <li>Type HR-BD for Dual-Side mammography imaging: 18 x 24 cm, 24 x 30 cm</li> </ul> Cassette: <ul style="list-style-type: none"> <li>Type DM with barcode on cassette: 18 x 24 cm, 24 x 30 cm</li> </ul>	Imaging Plate: <ul style="list-style-type: none"> <li>Type HR-BD for Dual-Side mammography imaging: 18 x 24 cm, 24 x 30 cm</li> </ul> Cassette: <ul style="list-style-type: none"> <li>Type DM with barcode on cassette: 18 x 24 cm, 24 x 30 cm</li> </ul>
<b>Processing Capacity:</b>	Imaging Plate Cassette: <ul style="list-style-type: none"> <li>Per hour processing capacity in high-pixel density, two-image output format: HR-BD 18 x 24 cm (45 IP), HR-BD 24 x 30 cm (40 IP)</li> <li>Time to print on DRYPIX 7000 (18 x 24 cm HR-BD): 140 sec.</li> <li>Time to display on CR Console (18 x 24 cm HR-BD): 50 sec.</li> </ul>	Imaging Plate Cassette: <ul style="list-style-type: none"> <li>Per hour processing capacity in high-pixel density, two-image output format: HR-BD 18 x 24 cm (80 IP), HR-BD 24 x 30 cm (65 IP)</li> <li>Time to print on DRYPIX 7000 (18 x 24 cm HR-BD): 140 sec.</li> <li>Time to display on CR Console (18 x 24 cm HR-BD): 50 sec.</li> </ul>
<b>Number of Stackers:</b>	1	4
<b>Reading Gray Scale:</b>	12 bits	12 bits
<b>Dimensions (W x D x H):</b>	655 x 740 x 1330 mm (26" x 29" x 52")	655 x 740 x 1480 mm (26" x 29" x 58")
<b>Weight:</b>	240 kg (529 lbs.)	285 kg (628 lbs.)
<b>Power Supply Conditions:</b>	AC 120-240V ±10% (50-60Hz), Single phase 7A (max)	AC 120-240V ±10% (50-60Hz), Single phase 7A (max)



Classified  
 Computed Radiography  
 WITH RESPECT TO ELECTRIC SHOCK, FIRE  
 AND MECHANICAL HAZARDS ONLY  
 IN ACCORDANCE WITH UL2604/CAN/CSA C22.2 NO.801  
 EEC 60601-1 53MK



	FUJIFILM Dry Laser Imager DRYPIX 4000	FUJIFILM Dry Laser Imager DRYPIX 7000
<b>Applicable Film:</b>	Fuji Medical Dry Imaging Film DI-HL (blue base) / DI-HLc (clear base) 35.6 x 43.2 cm (14" x 17"), 25.7 x 36.4 cm, 25.4 x 30.5 cm (10" x 12") or 20.3 x 25.4 cm (8" x 10")	Fuji Medical Dry Imaging Film DI-HL (blue base) / DI-HLc (clear base) 35.6 x 43.2 cm (14" x 17"), 25.7 x 36.4 cm, 25.4 x 30.5 cm (10" x 12") or 20.3 x 25.4 cm (8" x 10")
<b>Film Trays:</b>	Up to 2	Up to 3
<b>Film Loading:</b>	Daylight film loading	Daylight film loading
<b>Processing Capacity (sheets per hour, standard or high resolution):</b>	110 (14" x 17"), 160 (25.7 x 36.4 cm), 160 (10" x 12"), 160 (8" x 10")	180 (14" x 17"), 240 (25.7 x 36.4 cm), 230 (10" x 12"), 200 (8" x 10")
<b>Gray Scale Resolution:</b>	14 bits	14 bits
<b>Pixel Size:</b>	100/50 microns is selectable for all sizes.	100/50 microns is selectable for all sizes.
<b>Input Channels:</b>	DICOM network channel	DICOM network channel
<b>Image Memory:</b>	Standard 256MB (512MB optional)	Standard 256MB (512MB optional)
<b>Density Adjustment:</b>	Automatic density correction	Automatic density correction
<b>Optional Sorter Bins:</b>	4 bins	10 bins
<b>Dimensions (W x D x H):</b>	600 x 585 x 1040 mm (24" x 23" x 41")	735 x 680 x 1240 mm (29" x 27" x 49")
<b>Weight:</b>	130 kg (287 lbs.)	203 kg (448 lbs.)
<b>Power Supply:</b>	AC 200-240V (50-60Hz), Single phase 6A	AC 200-240V (50-60Hz), Single phase 12A



Classified  
 Medical Dry Laser Imager  
 WITH RESPECT TO ELECTRIC SHOCK, FIRE  
 AND MECHANICAL HAZARDS ONLY  
 IN ACCORDANCE WITH UL2604/CAN/CSA C22.2 NO.801  
 EEC 60601-1 53MK



FUJI COMPUTED RADIOGRAPHY CR Console	FUJIFILM Mammography Workstation
Quality assurance and patient ID workstation for FCR. <ul style="list-style-type: none"> <li>Optional software: DICOM MWLM, DICOM MPPS, DICOM CR Storage SOP, DICOM Storage Commitment, DICOM MG Storage, DICOM Print, Electronic shutter, Image composition, MFP, PEM, GPR and others.</li> </ul>	Mammography viewing station for FCR. <ul style="list-style-type: none"> <li>High resolution monitor is recommended.</li> <li>Single or dual monitor set up is available.</li> <li>Optional software: CAD<sup>*1</sup>, MFP, PEM<sup>*2</sup>, DICOM Print, DICOM CR Storage SOP</li> </ul> <p><sup>*1</sup> CAD: Although Fujifilm Mammography CAD algorithm aims to identify abnormal or malignant cancer candidates, there exist cases in which Fujifilm Mammography CAD may fail to identify abnormal or malignant candidates or mistakenly identify areas which are normal.</p> <p><sup>*2</sup> PEM: Pattern Enhancement processing for Mammography is a special image processing and therefore usage and application fine-tuning should only be executed under the supervision/assistance of a local Fujifilm representative.</p>

Specifications and PC requirements are subject to change without notice.  
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# FUJIFILM

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