FCR PROFECT ONE

NEW

FUJI COMPUTED RADIOGRAPHY

Gentle FCR for mammographic and pediatric imaging.
Delivering high-quality imaging from Fujifilm.

Image Intelligence™

State-of-the-art one-stacker FCR for high resolution digital mammography and pediatric imaging.

FCR PROFECT ONE is a 1-stacker X-ray image reader that follows the path of Fujifilm's high precision FCR PROFECT CS for superb digital mammography. One feature that separates the FCR PROFECT series from other models is Fujifilm's exclusive Dual-Side Reading Technology.

The system also supports IP[*1], HR-BD[*2] and ST-BD[*3] for optimal mammography and pediatric/neonatal imaging in which higher detectability is demanded. Further, smooth and seamless workflow, as well as superior operability is maintained at all times with this equipment that is also an optimal backup for the FCR PROFECT CS.

*1. Imaging Plate *2. High-Resolution Dual-Side Imaging Plate *3. Standard Dual-Side Imaging Plate
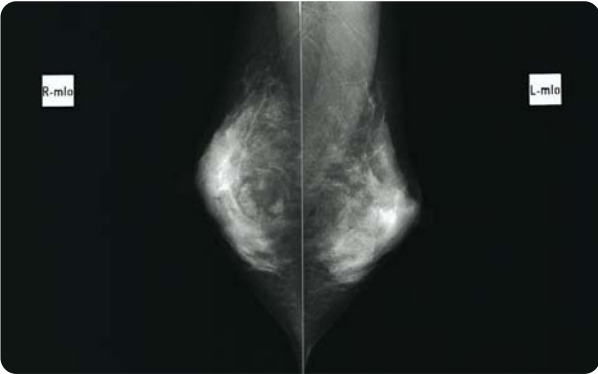
Dual-Side Reading Technology

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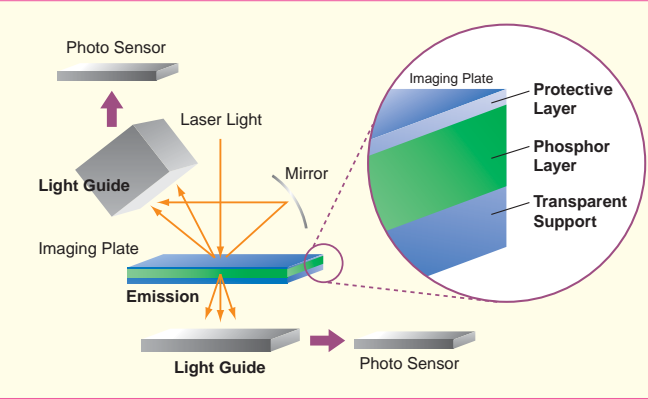
High-Precision Images For Various Needs

Digital Mammographic Imaging

Image quality is consistently high with wide latitude and sharp definition, whether it is for digital mammogram or plain X-ray, and whether on print or on display. Optimized images are the result of up to 20- pixel/mm scanning pitch and combining image-processing algorithms.

Digital Pediatric Imaging

Incredibly high quality pediatric and neonatal imaging, as well as images of premature infants, are promised by using IP ST-BD. Image graininess is drastically reduced, for clearer and more detailed contrast.

The system also delivers clearer images with less exposure dose, and therefore is gentle to the patient, even when the patient has to frequently take many X-rays.

Image Processing

"Image Intelligence™" – a set of sophisticated digital image-processing software technologies available through the CR Console – processes image data and optimizes final output.

MFP Multi-frequency Processing

As an optional software applicable for all types of FCR imaging, MFP is an improved version which uses frequency enhancement to provide more diagnostic data from a single exposure image, using Fujifilm's renowned Dynamic Range Control (DRC).
MFP improves visibility of both dense and peripheral tissue by simultaneously applying edge enhancement processing to small and large structures within an image.*

PEM Pattern Enhancement Processing for Mammography

As an optional software specifically developed for mammographic imaging, PEM enhancement processing improves the conspicuity of micro-calcifications.*

* Image processing requires the use of FCR CR Console Plus

Image Display and Processing

Operational convenience is given top priority to digital mammograms and plain X-rays that are consistently optimized in quality.

Digital Mammography System

A Digital Mammography System is created by linking FCR PROFECT ONE and/or FCR PROFECT CS to a Mammography Workstation MV-SR 657 via the CR Console, to maximize the performance of viewing any area that may be associated with breast cancer.

FCR PROFECT ONE

DRYPIX 4000

CR Console

DRYPIX 7000

FCR PROFECT CS

Mammography Workstation MV-SR 657

PROFECT ONE

FUJIFILM FCR PROFECT ONE Specifications

Standard Components:
- FCR PROFECT ONE Image Reader (Model: CR-IR 368)
- AC power cord

Other System Components (sold separately):
- CR Console Plus
- Image Recorder : DRYPIX 1000/3000/4000/7000
- ID Card Writer
- FCR Data Management System

Supplies:
Imaging Plate:
- ST-VI (Standard): 8" × 10", 10" × 12", 14" × 14", 14" × 17", 18 × 24 cm, 24 × 30 cm
- HR-V (High Resolution): 18 × 24 cm, 24 × 30 cm
- ST-BD (Standard Dual-Side Imaging): 18 × 24 cm, 24 × 30 cm
- HR-BD (Dual-Side Mammography): 18 × 24 cm, 24 × 30 cm
IP Cassette:
- Type C: 8" × 10", 10" × 12", 14" × 14", 14" × 17", 18 × 24 cm, 24 × 30 cm
- Type CM: 18 × 24 cm, 24 × 30 cm
- Type DS: 18 × 24 cm, 24 × 30 cm
- Type DM: 18 × 24 cm, 24 × 30 cm

Time Required for IP Feed/Load:
IP auto feed/load mechanism cycle time

IP Type	Required Time
14" × 17" (35 × 43 cm)	Approx. 60 sec.
14" × 14" (35 × 35 cm)	Approx. 54 sec.
10" × 12"	Approx. 50 sec.
8" × 10"	Approx. 40 sec.
24 × 30 cm (ST-VI)	Approx. 51 sec.
18 × 24 cm (ST-VI)	Approx. 42 sec.
24 × 30 cm (HR-V)	Approx. 65 sec.
18 × 24 cm (HR-V)	Approx. 55 sec.
24 × 30 cm (ST-BD)	Approx. 85 sec.
18 × 24 cm (ST-BD)	Approx. 75 sec.
24 × 30 cm (HR-BD)	Approx. 90 sec.
18 × 24 cm (HR-BD)	Approx. 85 sec.

Processing Capacity
(in high-pixel density two-image output format):

IP Type	When connected to DRYPIX 7000/CR Console Plus
24 × 30 cm (ST-BD)	Approx. 42 IPs/hr.
18 × 24 cm (ST-BD)	Approx. 48 IPs/hr.
24 × 30 cm (HR-BD)	Approx. 40 IPs/hr.
18 × 24 cm (HR-BD)	Approx. 45 IPs/hr.

Time to Print on DRYPIX 7000 (18 × 24 HR-BD) :
Approx. 140 sec.

Time to Print on DRYPIX 7000 (18 × 24 ST-BD) :
Approx. 140 sec.

Image Reading (Image output is via CR Console)

Reading Size	Standard Pixel-density		High Pixel-density	
	Spatial Resolution (Pixels/mm)	Number of Pixels	Spatial Resolution (Pixels/mm)	Number of Pixels
14" × 17" (35 × 43 cm)	5	1760 × 2140	10	3520 × 4280
14" × 14" (35 × 35 cm)	5	1760 × 1760	10	3520 × 3520
10" × 12"	6.7	1670 × 2010	10	2505 × 3015
8" × 10"	10	2000 × 2510	10	2510 × 2000
24 × 30 cm (ST-VI)	6.7	1576 × 1976	10	2364 × 2964
18 × 24 cm (ST-VI)	10	1770 × 2370	10	1770 × 2370
24 × 30 cm (HR-V)	6.7	1576 × 1976	10	2364 × 2964
18 × 24 cm (HR-V)	10	1770 × 2370	10	1770 × 2370
24 × 30 cm (ST-BD)	10	2364 × 2964	20	4728 × 5928
18 × 24 cm (ST-BD)	10	1770 × 2370	20	3540 × 4740
24 × 30 cm (HR-BD)	10	2364 × 2964	20	4728 × 5928
18 × 24 cm (HR-BD)	10	1770 × 2370	20	3540 × 4740

Number of Stackers: 1

Reading Gray Scale: 12 bits

Network: 10 Base T/100 Base TX

Dimensions (W x D x H): 655 × 740 × 1330 mm (26" × 29" × 52")

Weight: 240 kg (529 lbs.)

Power Supply Conditions:
Single phase 50-60Hz
AC120-240V ±10%
7A (max)

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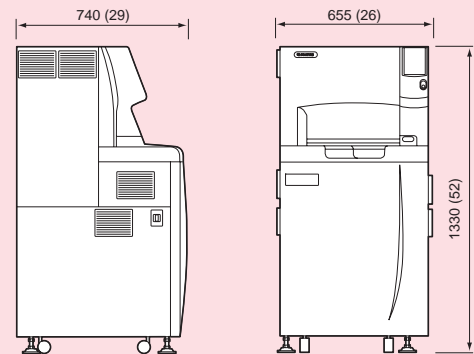 Humidity: 40-80%RH (No dew condensation)
- Non-operating Conditions:
  Temperature: 0-45°C
  Humidity: 10-90%RH (No dew condensation)

Dimensions

Unit: mm (in.)

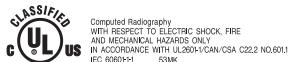740 (29)   655 (26)   1330 (52)

IP Cassette with Imaging Plate

DM Cassette with IP HR-BD for Dual-Side Mammography

DS Cassette with IP ST-BD for Standard Dual-Side imaging

FUJIFILM Digital Mammography System Product requires regulatory approval and not yet commercially available in North American market.
Specifications and PC requirements are subject to change without notice.
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FUJIFILM

FUJI PHOTO FILM CO., LTD.
26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106-8620, JAPAN