

FUJIFILM FCR PROTECT CS Specifications

- Standard Components:**
- FCR PROTECT Image Reader (Model: CR-IR 363)
 - AC Power Cord
- Other System Components:**
- CR Console Plus (sold separately)
 - Image Recorder : FL-IMD, FM-DP L, DRYPIX 1000/3000/7000
 - ID Card Writer
 - FCR Data Management System

- Supplies:**
- Imaging Plate Cassette:
- Type C (with barcode window): 14" x 17" (35 x 43cm), 14" x 14" (35 x 35cm), 10" x 12", 8" x 10", 24 x 30cm, 18 x 24cm and 24 x 30cm/18 x 24cm for mammography usage
 - HR-BD (dual-side light collection type): 24 x 30cm, 18 x 24cm
- Imaging Plate:
- ST-VI (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: 24 x 30cm, 18 x 24cm
 - HR-BD: 24 x 30cm, 18 x 24cm

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

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

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

| IP Type | When connected to DRYPIX 7000/CR Console Plus |
|-----------------------|---|
| 24 x 30cm (HR-BD) | Approx. 60 IPs/hr. |
| 18 x 24cm (HR-BD) | Approx. 80 IPs/hr. |
| 14" x 17" (35 x 43cm) | Approx. 103 IPs/hr. |
| 14" x 14" (35 x 35cm) | Approx. 120 IPs/hr. |
| 10" x 12" | Approx. 128 IPs/hr. |
| 8" x 10" | Approx. 165 IPs/hr. |
| 24 x 30cm (ST) | Approx. 128 IPs/hr. |
| 18 x 24cm (ST) | Approx. 165 IPs/hr. |
| 24 x 30cm (HR) | Approx. 110 IPs/hr. |
| 24 x 30cm (HR) | Approx. 90 IPs/hr. |

Time to Print on DRYPIX 7000 through network via CR Console:
Approx. 130 sec.

Time to print on DRYPIX 7000 (18 x 24 HR-BD) :
157 sec.

Time To Display On CR Console:

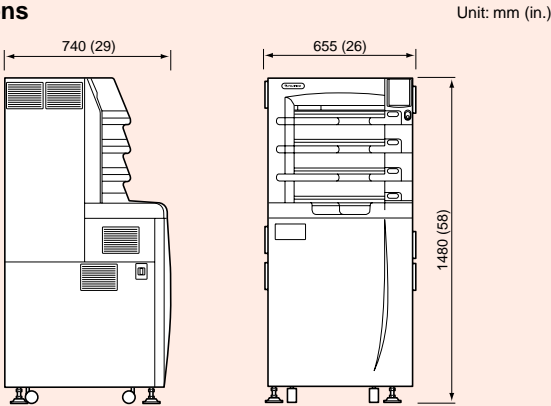
- 14" x 17" : 39 sec.
- 18 x 24cm HR-BD: 50 sec.

Image Reading

| Reading Size | Standard Pixel-density | | Hi Pixel-density | |
|-----------------------|--------------------------------|------------------|--------------------------------|------------------|
| | Spatial Resolution (Pixels/mm) | Number of Pixels | Spatial Resolution (Pixels/mm) | Number of Pixels |
| 14" x 17" (35 x 43cm) | 5 | 1760 x 2140 | 10 | 3520 x 4280 |
| 14" x 14" (35 x 35cm) | 5 | 1760 x 1760 | 10 | 3520 x 3520 |
| 10" x 12" | 6.7 | 1670 x 2010 | 10 | 2505 x 3015 |
| 8" x 10" | 10 | 2000 x 2510 | 10 | 2510 x 2000 |
| 24 x 30cm (ST) | 6.7 | 1576 x 1976 | 10 | 2364 x 2964 |
| 18 x 24cm (ST) | 10 | 1770 x 2370 | 10 | 1770 x 2370 |

- Number Of Stackers:** 4
- Reading Gray Scale:** 12 bits
- Network:** 10 Base T/100 Base T
- Dimensions (W x D x H):** 655 x 740 x 1480mm (26" x 29" x 58")
- Weight:** 285kg (628lbs.)
- 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



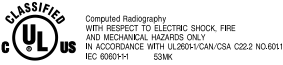
IP Cassette with Imaging Plate



HR-BD Cassettes (18 x 24cm and 24 x 30cm).
Other various sizes also available.



"Image Intelligence™" is a set of sophisticated digital image-processing software technologies that are incorporated in the FCR PROTECT CS.



Specifications and PC requirements are subject to change without notice.
All brand names or trademarks are the property of their respective owners.
FCR Mammography is not for sale in the USA.



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



FUJI COMPUTED RADIOGRAPHY

An all-purpose FCR reader with precise 50 micron resolution imaging and faster mammography exams

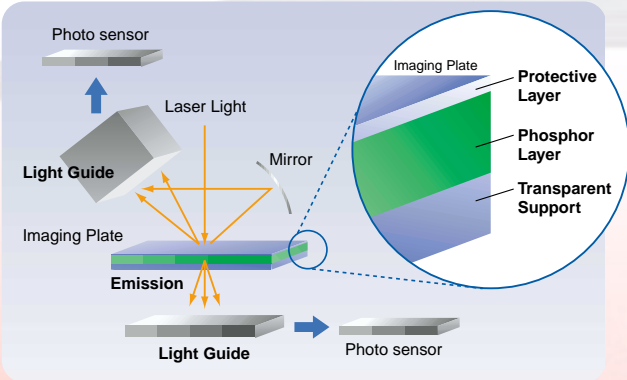


Setting new standards in digital mammography

Fujifilm responds to high-throughput and other market needs of digital mammography with the introduction of PROTECT CS, a next-generation FCR reader offering image quality optimized to satisfy the most demanding applications. Features include processing capacity sufficient to cover two mammography-screening rooms, and processing power to process standard examinations. Its 4-cassette stacker and the CR Console's easy operability realize increasing workflow efficiency and enhanced diagnostic breadth.

Image Acquisition – Dual-sided reading

Fujifilm's proprietary dual-sided IP reading technology enables precise extraction of image data from both sides of the imaging plate, ensuring final images with higher Detective Quantum Efficiency (DQE).



High Productivity – 80 images per hour

Profect CS can process up to 80 IP (HR-BD 18 x 24 cm) per hour, sufficient to cover two mammography rooms without stress, as well as up to 103 standard IP per hour ensuring the versatility for departmental use of CR imaging.



Image Display and Processing – CR Console

With digital mammograms as well as plain x-ray images consistently optimized for quality, and utilizing the same user interface as our well-regarded CR Console, operational convenience is given top priority.



Output – Image quality

Image quality is consistently high with wide latitude and sharp definition, whether 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.

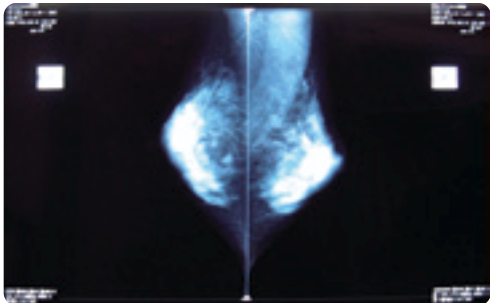


Image processing

"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

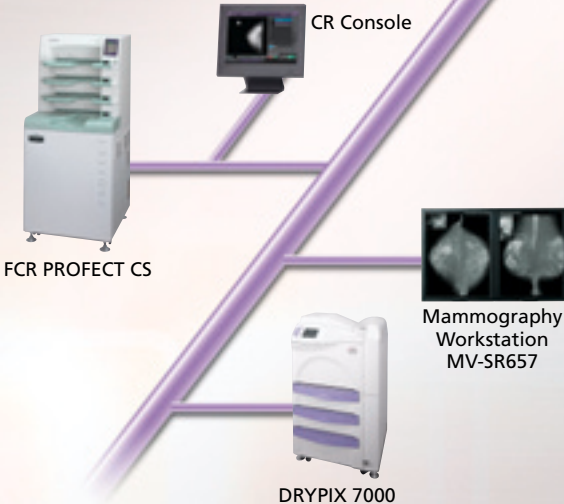
An optional software applicable for all types of FCR imaging, MFP is an improved version of Fujifilm's renowned Dynamic Range Control (DRC), and uses frequency enhancement to provide more diagnostic data from a single exposure image. MFP improves visibility of both dense and peripheral tissues by simultaneously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

PEM Pattern Enhancement Processing for Mammography

An optional software specifically developed for mammographic imaging, PEM enhancement processing significantly facilitates identification of tumors while improving the conspicuity of micro-calcifications.

Digital Mammography System

Create a Digital Mammography System by linking Profect CS via CR Console to Mammography Workstation MV-SR657, to greatly increase your potential for early detection of breast cancer.



PROTECT CS