

FCR CAPSULA XLII

Rapid processing and precise image reading ideal for X-ray images including mammograms



FCR CAPSULA XLII with Imaging Plate HR-VI has cleared FDA^{*1}/510k^{*2} for mammography applications in the U.S.A market as "ASPIRE CR FOR MAMMOGRAPHY SYSTEM (CRM)". The "ASPIRE CR FOR MAMMOGRAPHY SYSTEM (CRM)" is a full-field digital mammography system consisting of the three main components; FCR Capsula XLII (CR-IR 359), Imaging Plate HR-VI and Console (CR-IR 348 CL).

*1: FDA (U.S. Food and Drug Administration) *2: 510k (Premarket submission made to FDA)

FCR CAPSULA XLII with Imaging Plate HR-VI has complied to basic concept and limiting values of European guidelines for quality assurance in breast cancer screening and diagnosis (Fourth Edition of EUREF) tested by Helmholtz, German Research Center.

Introducing a newly upgraded FCR CAPSULA XLII designed with a new form and equipped with state-of-the-art functions including an optional capability of 50-micron reading with high resolution imaging plates (HR-V and HR-VI).



One of the FCR key components is an Imaging Plate, or IP, that is used in place of X-ray film to easily digitize X-ray images. The FCR CAPSULA XLII features the IP in an unprecedented compact frame, as it incorporates over 70 years of FUJIFILM's extensive technology and know-how.

CAPSULA, meaning small box in Latin, has been cleverly trimmed to be smaller and lighter, boosting flexibility on installation and layout, while maintaining the specifications for a broad range of diagnostic imaging needs from general radiography to pantomography.

Plus, the optional capability of 50-micron reading with the HR-V or HR-VI can be utilized to visualize finer and more minute structures for better diagnosis.

Compact with High Efficiency

FCR CAPSULA XLII enables extremely high throughput of up to approximately 94 IPs/hr.* and the time to display the image on the CR Console monitor is approximately 23 sec., in spite of its compactness.

Processing Capacity
94 IPs/hr.



* When a 35 x 35 cm (14" x 14") IP is read at 5 pixels/mm.

All-in-one unit for all diagnostic imaging needs

Three types of IP cassettes (Type CC, LC and CH**) can cover various imaging such as chest, lumbar spine, pantomography (15 x 30cm), and extremities. Virtually all imaging requirements can be satisfied with the single unit.

** The optional 50-micron reading kit with HR-V or HR-VI necessary



Easy Operations monitored on Screen

Capable of automatically starting the IP reading and image processing when the IP cassette is inserted, the system is designed to complete the IP reading cycle with simple operations. Setting parameters can be changed with the buttons on the monitor screen. The screen can also display the status and the time remaining to complete the IP reading process for user-convenience.

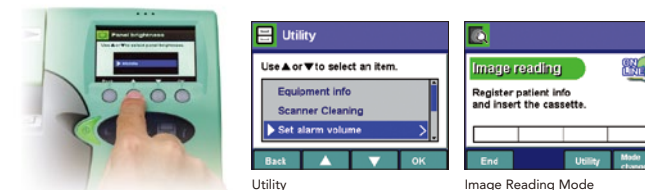


Image Display and Processing – CR Console

The multi-function console handles all complex procedures of digital X-ray imaging – patient ID, image reviewing, processing and printing, DICOM interface, and more – as well as quality assurance functions all within a single workstation.

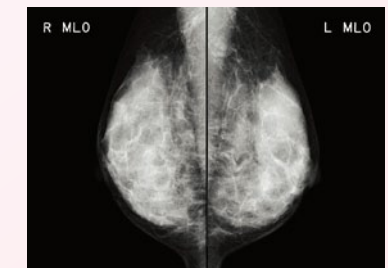
Featuring Image Intelligence™ Technology



Fujifilm's unique Image Intelligence™ processing technologies to realize clear and crisp images.

Mammography applications* (Optional)

FCR CAPSULA XLII equipped with the optional capability of 50-micron reading with the HR-V or HR-VI and the IP cassette type CH can visualize finer and more minute structures.



HR-VI** is improved type IP from HR-V, and has the following additional features.

Image Quality Improvement

By Using Fujifilm's imaging plate technologies, HR-VI's image quality improved compared to HR-V.

Compatible with MAMMOASCENT AWS-c

The MAMMOASCENT AWS-c optimizes your mammography examinations with its advanced design and features. Correspondence to Fujifilm Mammography QC Program with 1Shot Phantom.



Compatible with Fujifilm Mammography QC Program

Fujifilm Mammography QC Program is a dedicated quality control program applicable to FUJIFILM digital mammography system. This program enables the system to keep a stable image quality for both screening and diagnosis.



* In the Canadian market, the unit cannot be applicable to mammography. In other countries, the local applicable regulations and /or guidelines should be followed.
** CAPSULA XLII with HR-VI has cleared FDA/510k for mammography applications. Using HR-VI required specific version of Software.

FCR CAPSULA XLII Specifications

Standard Components	FCR CAPSULA XLII Image Reader Unit (Model: CR-IR 359) AC power cord
Other System Components	Optional upgrade kit for 50-micron reading with HR-V or HR-VI IP cassette type CC, LC, CH CR Console, CONSOLE ADVANCE*, AWS-c Dry Imager: DRYPIX 2000, 4000, 7000
Supplies	Imaging Plate: <ul style="list-style-type: none"> • ST-VI: 35 × 43cm (14" × 17"), 35 × 35cm (14" × 14"), 10" × 12", 8" × 10", 24 × 30cm, 18 × 24cm, 15 × 30cm • HR-V: 24 × 30cm**, 18 × 24cm*** • HR-VI: 24 × 30cm**, 18 × 24cm*** IP Cassette: <ul style="list-style-type: none"> • Type CC: 35 × 43cm (14" × 17"), 35 × 35cm (14" × 14"), 10" × 12", 8" × 10", 24 × 30cm, 18 × 24cm, 15 × 30cm • Type LC: 35.4 × 124.5cm, 35.4 × 101.7cm, 35.4 × 83.7cm, 25.2 × 58cm, 24 × 57cm • Type CH: 24 × 30cm**, 18 × 24cm*** (For 50-micron reading with HR-V or HR-VI)

Time Required for IP Feed/Load:

IP Type	Required Time
ST-VI 35 × 43cm (14" × 17")	Approx. 58 (41) sec.
ST-VI 35 × 35cm (14" × 14")	Approx. 52 (38) sec.
ST-VI 10" × 12"	Approx. 49 sec.
ST-VI 8" × 10"	Approx. 41 sec.
ST-VI 24 × 30cm	Approx. 48 sec.
ST-VI 18 × 24cm	Approx. 39 sec.
ST-VI 15 × 30cm	Approx. 49 sec.
HR-V 24 × 30cm**	Approx. 59 sec.
HR-V 18 × 24cm***	Approx. 51 sec.
HR-VI 24 × 30cm**	Approx. 59 sec.
HR-VI 18 × 24cm***	Approx. 51 sec.

- Under "Required Time" in the table above, figures in parentheses are at high-speed mode.
- Image erase time on IP is directly related to the exposure made. It is assumed to be at 25mR for ST-VI and 600 mR for HR-V.
- The performance described above shows typical values. It varies depending on the exposure level.

Processing Capacity

IP Type	Processing Capacity
ST-VI 35 × 43cm (14" × 17")	Approx. 62 (87) IPs/hr.
ST-VI 35 × 35cm (14" × 14")	Approx. 70 (94) IPs/hr.
ST-VI 10" × 12"	Approx. 73 IPs/hr.
ST-VI 8" × 10"	Approx. 87 IPs/hr.
ST-VI 24 × 30cm	Approx. 75 IPs/hr.
ST-VI 18 × 24cm	Approx. 92 IPs/hr.
ST-VI 15 × 30cm	Approx. 73 IPs/hr.
HR-V 24 × 30cm**	Approx. 61 IPs/hr.
HR-V 18 × 24cm***	Approx. 70 IPs/hr.
HR-VI 24 × 30cm**	Approx. 61 IPs/hr.
HR-VI 18 × 24cm***	Approx. 70 IPs/hr.

- Figures in parentheses and conditions are the same as those of "Time Required for IP Feed/Load".
- The time required to change the cassette is assumed to be 0 (zero) seconds.

Time to Display on CR Console:

- Approx. 42 sec. in case of 35 × 43cm (ST-VI) with 100-micron reading
- Approx. 32 sec. in case of 18 × 24cm (HR-V)*** with 50-micron reading

Time to Print on DRYPIX 4000 through network via CR Console:

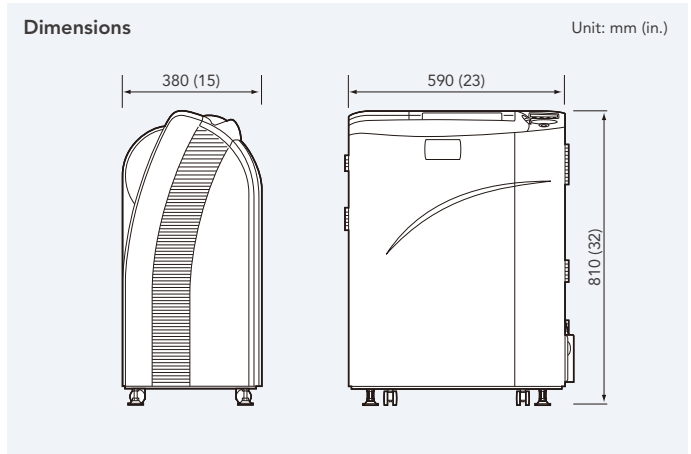
- Approx. 145 sec. in case of 35 × 43cm (ST-VI) with 100-micron reading
- Approx. 140 sec. in case of 18 × 24cm (HR-V)*** with 50-micron reading

Reading Specification

Inches	Metric	Reading Specification	
		Standard Pixel-density	High Pixel-density
		High-speed mode	Standard mode
14" × 17" (ST-VI)	35 × 43cm (ST-VI)	5 pixels/mm	10 pixels/mm
14" × 14" (ST-VI)	35 × 35cm (ST-VI)	5 pixels/mm	10 pixels/mm
10" × 12" (ST-VI)	24 × 30cm (ST-VI)	-	10 pixels/mm
8" × 10" (ST-VI)	18 × 24cm (ST-VI)	-	10 pixels/mm
-	15 × 30cm (ST-VI)	-	10 pixels/mm
-	24 × 30cm (HR-V)**	-	20 pixels/mm
-	18 × 24cm (HR-V)***	-	20 pixels/mm
-	24 × 30cm (HR-VI)**	-	20 pixels/mm
-	18 × 24cm (HR-VI)***	-	20 pixels/mm

- * Not for Mammography application
- ** Requires the optional upgrade kit and the cassette adaptor
- *** Requires the optional upgrade kit

Number of Stacker	1
Reading Gray Scale	12 bits
Network	10 Base T/100 Base TX
Dimensions (W × D × H)	590 × 380 × 810mm (23" × 15" × 32")
Weight	99kg (218lbs.)
Power Supply Conditions	Single phase 50-60Hz AC120-240V ±10% 5A (max)
Environmental Conditions	Operating Conditions: <ul style="list-style-type: none"> • Temperature: 15-30°C • Humidity: 40-80%RH (No dew condensation) Non-operating Conditions: <ul style="list-style-type: none"> • Temperature: 0-45°C • Humidity: 10-90%RH (No dew condensation)



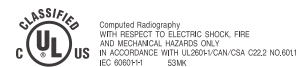
IP Cassette



24 × 30cm cassette mounted with the cassette adaptor



This equipment is a Class 1 laser product (IEC60825-1:2007).



FCR CAPSULA XLII (CR-IR 359) CE 0123

Specifications are subject to change without notice.
All brand names or trademarks are the property of their respective owners.
In some countries, regulatory approval may be required to import medical devices.
For the availability of these products, please contact your local sales representatives.



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