

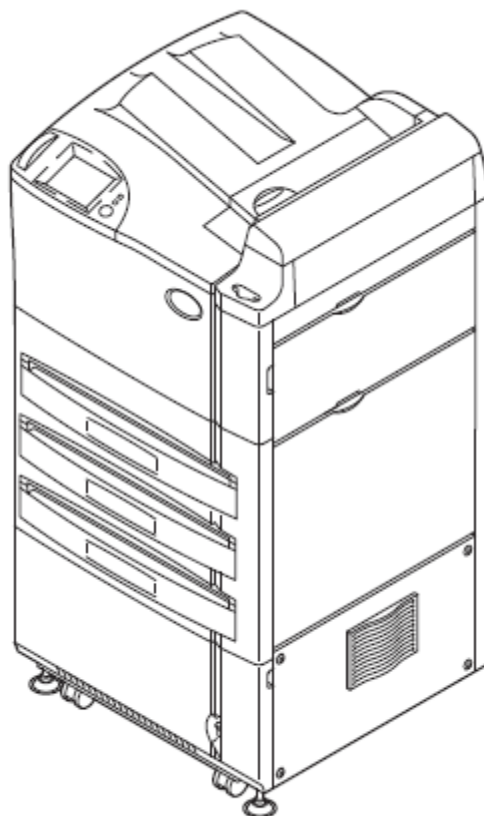


Fuji Medical Dry Laser Imager

DRYPIX PLUS

Product Specifications

1st Edition
April, 2011



FUJIFILM Corporation

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1. Overview

The Fuji Medical Dry Laser Imager DRYPIX PLUS is the equipment that outputs digital images received from FCR image readers or CT, MRI and other imaging modalities onto Fuji Medical Dry Imaging Film.

2. Features

- (1) Water, developer, fixer and other chemicals are completely unnecessary, doing away with the need for drainage and exhaust facilities and related construction. There is also no need for space to store chemicals.
- (2) Chemical handling, replenishment, disposal processing and the related time and effort are not necessary. Moreover, environmental pollution is prevented.
- (3) Compact, small design is achieved. Film can be handled under daylight room conditions, doing away with the need for darkrooms.
- (4) High-speed processing that handles
Approx. 110 films (14"×17") / hour or
Approx. 160 films (26×36cm) / hour.
- (5) High-quality image boasting of Dmax3.3 or higher and Dmin0.23 or lower is achieved.
- (6) Directly connectable to the DICOM network.
- (7) The color LCD touch panel used for the Operation Panel enables simplified easy-to-view operation. In addition, the Signal Lamp enables the user to check the equipment status visually.
- (8) Power consumption of the equipment can be saved by setting Economy Mode.
- (9) A film jam can be corrected by opening covers as necessary.
- (10) Having a maximum of three film trays, three kinds of sizes you want can be selected and loaded from among 14"×17", 14"×14", 10"×14", 10"×12" and 8"×10".
- (12) A three-bin sorter incorporated enables films to be sorted to the four ejection ports (option).

3. System Components

3.1 Standard Components

- (1) DRYPIX PLUS main unit
 - 100V model
 - One-tray type
 - Two-tray type
 - Three-tray type
 - 200V model
 - One-tray type
 - Two-tray type
 - Three-tray type

- (2) CD 3
 - Individual data CD
 - Main unit software CD
 - Reference Guide & QC Reference Guide CD

- (3) Operation Manual 1

3.2 Options

- (1) Film tray (additional)

- (2) Fall prevention fixture kit

- (3) Sorter

- (4) Power Cable

3.3 Supplies

- Fuji Medical Dry Imaging Film
- DI-HL (blue base), DI-HLc (clear base)
 - 35 × 43cm (14"×17") 100 films/pack
 - 35 × 35cm (14"×14") 100 films/pack
 - 26 × 36cm (10"×14") 150 films/pack
 - 25 × 30cm (10"×12") 150 films/pack
 - 20 × 25cm (8"×10") 150 films/pack
 - DI-ML (blue base)
 - 26 × 36cm (10"×14") 150 films/pack
 - 25 × 30cm (10"×12") 150 films/pack
 - 20 × 25cm (8"×10") 150 films/pack

4. Specifications

4.1 Image Recording System Laser exposure thermal development system

4.2 Processing Capacity

Film size	Processing capacity
35 × 43cm (14"×17")	Approx. 110 films/hour
35 × 35cm (14"×14")	Approx. 125 films/hour
26 × 36cm (10"×14")	Approx. 160 films/hour
25 × 30cm (10"×12")	Approx. 160 films/hour
20 × 25cm (8"×10")	Approx. 160 films/hour

* Processing capacity achieved when this equipment is in actual use will depend on the model of the connected imaging modality and how it is used.

4.3 Time Required for Output of 1st Film Approx. 85 sec. (35 × 43cm (14"×17") size for test printing)

4.4 Time Required for Startup • Approx. 15 minutes under 25°C room temperature conditions

4.5 Pixel Size

- Standard : 100µm
- High resolution : 50µm

* 50µm or 100µm selectable by service setting.

4.6 Maximum Number of Recording Pixels

- Image recording at 100µm size
 - 35 × 43cm (14"×17") : 3520×4280
 - 35 × 35cm (14"×14") : 3520×3520
 - 26 × 36cm (10"×14") : 2540×3600
 - 25 × 30cm (10"×12") : 2506×3016
 - 20 × 25cm (8"×10") : 2000×2510
- Image recording at 50µm size
 - 35 × 43cm (14"×17") : 7040×8560
 - 35 × 35cm (14"×14") : 7040×7040
 - 26 × 36cm (10"×14") : 5080×7200
 - 25 × 30cm (10"×12") : 5012×6032
 - 20 × 25cm (8"×10") : 4000×5020

4.7 Gray Scale 14 bits

4.8 Maximum Density DI-HL、DI-HLc ; Select one of 2.64, 3.0, and 3.3
DI-ML ; Select one of 3.6*、4.0*
* 3.6 ,4.0 is for mammography use.
** Maximum density setting 3.6 or 4.0 applies not only to each individual film tray, but to all film trays.

- 4.9 Input I/F** DICOM Network input 1ch
- 4.10 Film Supply** Film loading tray system under daylight conditions.
Three supply
- 4.11 Density Calibration Function** Automatic density calibration function incorporated.
- 4.12 Connectable Modalities and Devices**
- (1) Connectable to various imaging modalities that provide support to the DICOM print function.
 - (2) DRYPIX Link is used for connection to imaging modalities not connected to the DICOM network.
 - (3) Major FujiFilm devices connectable to the DRYPIX PLUS include:
- 4.13 Format**
- (1) Standard format (for all film sizes)
1, 2, 3, 4, 6, 8, 9, 12, 15, 16, 18, 20, 24, 25, 28, 30, 32, 35, 36, 40, 42, 48, 49, 54, 56, 63, 64, 70,72,80
 - (2) Mixed format
 - 14"×17" Portrait mixed format 6 formats
 - 14"×14" mixed format 5 formats
 - 10"×14" (26×36cm) Portrait mixed format 1 format
 - 10"×14" (26×36cm) Landscape mixed format 4 formats
 - 10"×12" Portrait mixed format 1 format
 - 10"×12" Landscape mixed format 4 formats
 - 8"×10" Portrait mixed format 1 format
 - 8"×10" Landscape mixed format 4 formats
- 4.14 Gradation Conversion** 8 Look-up tables (LUTs) are supported per a client (AE Title).
- 4.15 Interpolation Mode** 3 mode (Sharp, Medium and Smooth) per a client (AE Title) are available for selection.
- 4.16 Image Frame** Possible to attach an image frame around each image.
- 4.17 Background** Black or clear border available for the background.

4.18 DICOM Connection Specifications

- (1) Network connection I/F
 - 10BASE-T / 100BASE / 1000BASE -TX (Auto-Negotiation)
 - Half duplex / Full duplex (Auto-Negotiation)
- (2) DICOM network connection I/F specifications
 - Verification SOP Class
 - Basic Gray Scale Print Management Meta SOP Class
 - Print Job SOP Class
 - Basic Annotation Box SOP Class
 - Print Queue Management SOP Class
 - User Preference LUT SOP Class
- (3) Number of clients that can be registered
A maximum of 64
- (4) Number of sessions that can be established at the same time
A maximum of 10
- (5) Maximum input image size Row : 8800
Column: 8800

4.19 Sorter (Option)

- (1) Number of bins 3
(A maximum of four bins, including the one of the Output Film Tray on top of the main unit, can be used for sorting.)
- (2) Number of stackable films
 - Sorter..... A maximum of 30 films/bin
 - Output Film Tray..... A maximum of 150 films

5. Operation Overview

- (1) Image data sent from the imaging modalities are received by the input interface and stored in image memory.
- (2) Following magnification/reduction processing, image data will be sent to the recording unit.
- (3) Film is taken out from the film supply magazine one sheet at a time, image is recorded on it, and then output to the tray.
- (4) When the optionally available sorter is provided, films are ejected to a pre-determined sorter bin or tray.

6. Power Supply Conditions

- (1) Line voltage
AC100-120/200-240V±10%

Single phase (2 lines or 3 lines)

Frequency

50-60Hz

Rated current

AC100-120V: 12A

AC200-240V: 6A

Power consumption

Maximum 1.5kW

Electric energy

Printing: 470Wh

Ready: 250Wh

Power Saving: 170Wh

Sleep: 120Wh

Maximum heat generation

Printing: 1,700kJ

Ready: 900kJ

7. Environmental Conditions

Operating conditions

Temperature: 15°C(40%) - 30°C(70%)
 Humidity: 15%RH(30°C) - 70%RH(30°C)
 (No dew condensation)

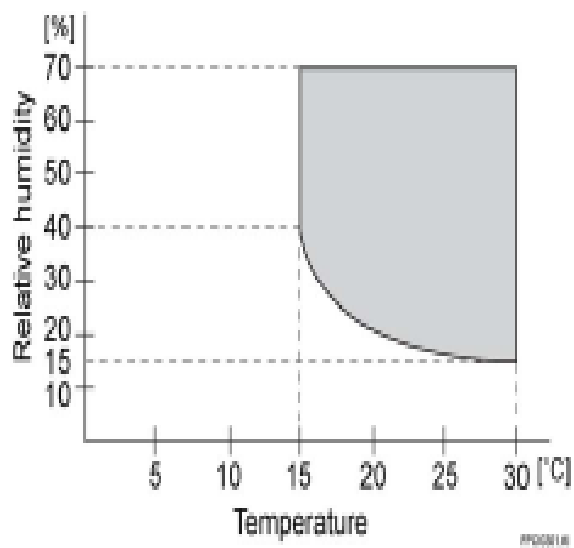
Atmospheric pressure: 700 - 1,060hPa

Equipment Noise

Operating state: 50dB or less*
 (Except single sound)

Standby state: 45dB or less*

* Measurement values based on office regulation (Frontal sound pressure level. Comply with ISO1996-1 and ISO1996-2)



- (2) Non-operating conditions (not including film)
- Temperature: 0 - 45°C
 Humidity: 10 - 90%RH
 (No dew condensation)
 Atmospheric pressure: 500 - 1,060hPa

**8. Footprint for Installation /
Space Required for
Maintenance**

Installation space

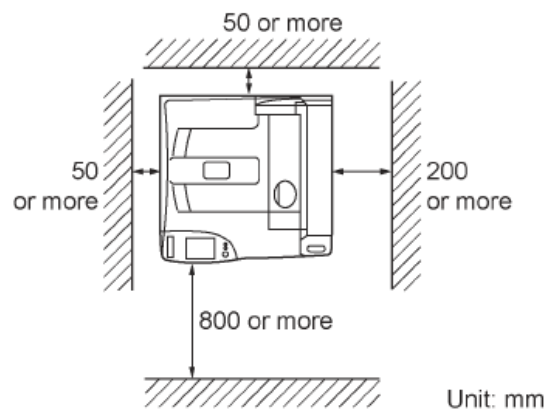
When Not Fixed with Fixtures

Front	Back	Left side	Right side
800mm or more	50mm or more	50mm or more	200mm or more

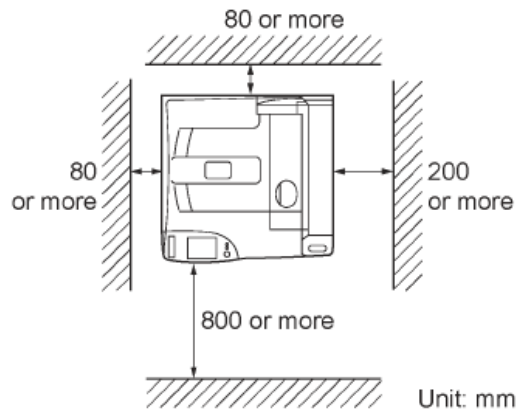
When Fixed with Fixtures

Front	Back	Left side	Right side
800mm or more	80mm or more	80mm or more	200mm or more

■ When Not Fixed with Fixtures



■ When Fixed with Fixtures



(2) Space required for maintenance work

When Not Fixed with Fixtures

Front	Back	Left side	Right side
1000mm or more	600mm or more	800mm or more	800mm or more

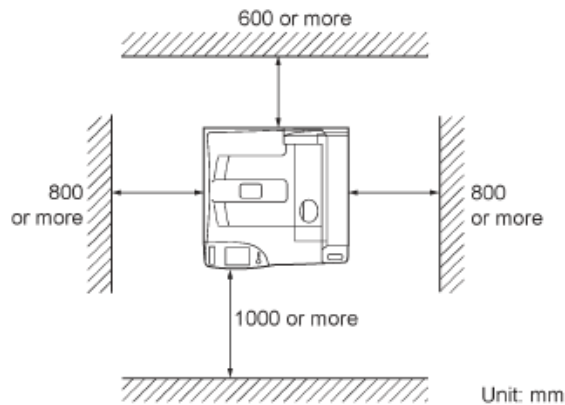
When Fixed with Fixtures

Front	Back	Left side	Right side
1000mm or more	80mm ¹⁾ or more	250mm or more	250mm or more

■ When Not Fixed with Fixtures

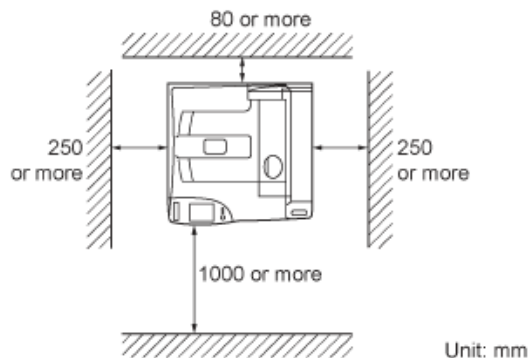
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To rotate the equipment, one side requires more than 1000 mm of space.



■ When Fixed with Fixtures

● Space for Removing Fixtures



● Maintenance Space after Removing Fixtures

The same space as "■ When Not Fixed with Fixtures" is required.

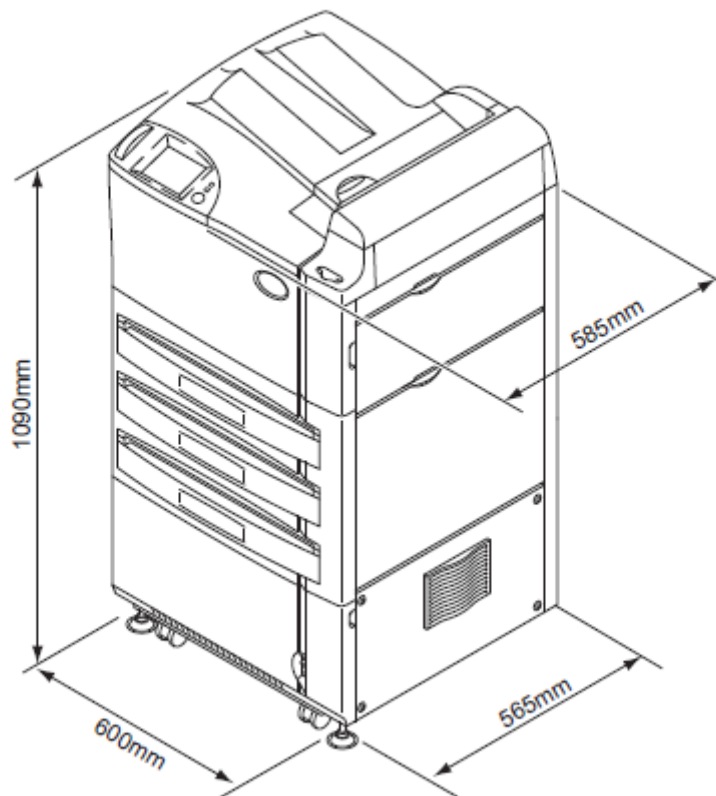
9. External Dimensions and Mass

With no sorter

Width (mm)	Depth (mm)	Height (mm)	Mass (kg)
Approx. 600	Approx. 585	Approx. 1090	Approx. 160 (including the three trays)

Dimensions and Mass are approximate and are subject to change without prior notice. (Values in the table above do not include those of protrusions.)

• Three-tray: W600×D585×H1090 (mm)

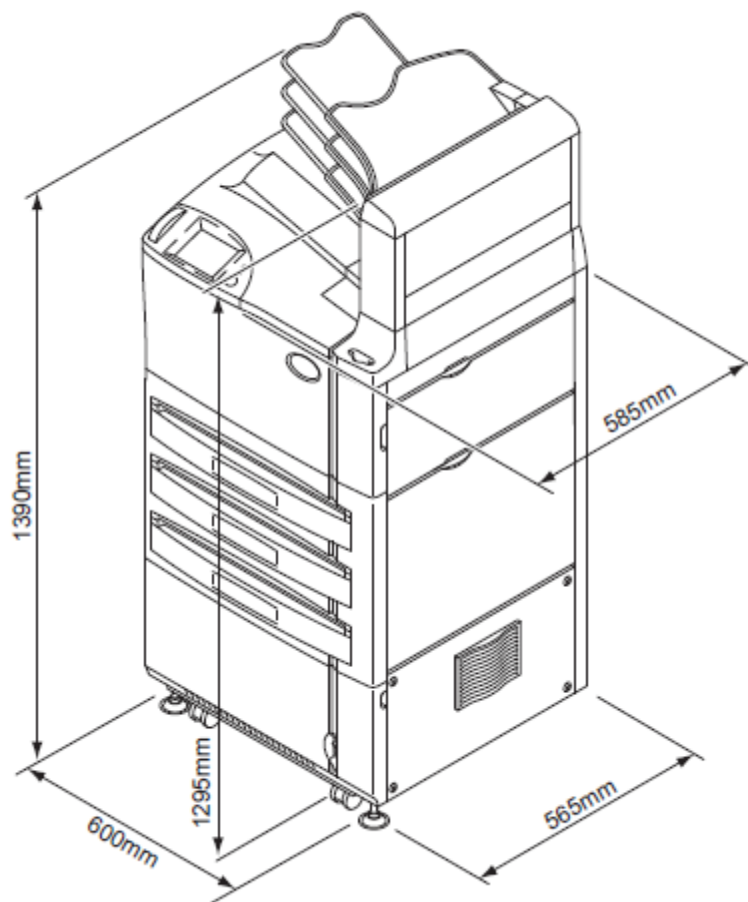


With sorters

Width (mm)	Depth (mm)	Height (mm)	Mass (kg)
Approx. 600	Approx. 585	Approx. 1390	Approx. 170 (including the three trays)

Dimensions and Mass are approximate and are subject to change without prior notice. (Values in the table above do not include those of protrusions.)

- Three-tray: W600 × D585 × H1390 (mm)



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