

# Medical Film Printer

Medical film printer, which sends image datum in Dicom format via network and then forms images by the thermal imaging technology. It can perfectly meet the needs of CT, MRI, DR and CR.



## Product Name

- Medical film printer

## Type

- 5302

## Application Fields

- X-ray, CT, MRI, etc.

## Spatial Resolution

- 320 dpi(12.6pixels/mm)

## Media Sizes

- 8x10in, 10x12in, 11x14in, 14x17in

## Media

- Thermal film

## Media Inputs

- 2 supply cassettes, 100 sheets each

## Printing Resolution

- 14bits printing

## Throughput

- 8×10in: 130 sheets/hour (28 sec. per sheet)
- 11×14in: 86 sheets/hour (42 sec. per sheet)
- 14×17in: 75 sheets/hour (48 sec. per sheet)
- Access time first sheet: 77 sec. (14x17in-12-bits)

## Dmax

- $\geq 3.0$  D

## Archival

- >20 years under ANSI extended-term storage conditions

## Media Supply

- All films are pre-packaged and factory sealed

## Image Formats

- Standard: DICOM, TIFF, GIF, PCX, BMP, PGM, PNG, XWD, JPEG, SGI(RGB), Sun Raster, Targa
- Optional: PostScript™ compatibility

## Image Quality

- Manual calibration

## Image Control

- Gamma, Contrast, Polarity, Rotation, Scaling, Antialiasing

## Sheet Control

- Density adjustment(Dmax), look-up tables(LUT), image warnings, captions, sheet coverage, border fill, crop anchor

## Sheet Formatting

- 1:1-1:81; Variable multi-formatting (VMF™), fixed multi-formatting (FMF™)

## Control Panel

- Large, backlit LCD display, status lights include online, alert, fault, active power and menu navigation buttons

## Processor

- Intel

## Removable Storage

- USB for software upgrades

## Network Protocols

- Standard: 24 DICOM connections, FTP, LPR
- Optional: Windows network printing

## Time to Operate

- 5 minutes(ready to print from “off”)

## Power

- Universal Input: 100-120/230VAC~50/60Hz, 400W printing, 45W idle

## Noise

- Printing: <60db
- Idle: <50 db

## Storage Environment

- Temperature: -22°C-50°C
- Humidity: 30%-80% (non-condensing)

## Operating Environment

- Temperature: 15°C-30°C
- Humidity: 35%-75%(non-condensing)

## Weight

- 90Kg

## Engine Dimensions

- 728 mm (L) × 715 mm (W) × 536mm(H)

# Medical Film Printer

Medical film printer, which sends image datum in Dicom format via network and then forms images by the thermal imaging technology. It can perfectly meet the needs of CT, MRI, X-ray and other imaging application.



## Product Name

- Medical film printer

## Type

- 369-1
- 369-2

## Application Fields

- X-ray, CT, MRI, etc

## Spatial Resolution

- 369-1: 320dpi
- 369-2: 508dpi

## Media Sizes

- 8×10in, 10×12in, 11×14in, 14×17in

## Media

- Thermal film

## Media Inputs

- 2 supply cassettes, 100 sheets each

## Print Technology

- Direct thermal(dry, daylight safe operation)

## Media Supply

- All media is pre-packaged and factory sealed

## Throughput

- 14×17in: About 60 sheets/hour
- 8×10in: About 85 sheets/hour

## Grayscale Contrast Resolution

- 14bits(16, 384)

## Interfaces

- 10/100 Base-T Ethernet (RJ-45)

## Network Protocols

- DICOM connection

## Image Formats

- DICOM

## Image Control

- Gamma, Contrast, Polarity, Scaling

## Control Panel

- Backlit LCD display, status lights include online, alert and fault

## Processor

- Intel

## Memory

- 4GB

## Hard Disk

- 500GB

## Power

- 100V-240V~50/60Hz, 600Wprinting, 75W

## Weight

- 45Kg

## Engine Dimensions

- 730mm(L)×518mm(W)×415mm(H)

## Operating Temperature

- 10°C-35°C

## Operating Humidity

- 35%-75%(non-condensing)

## Optimal Operating Temperature

- 22.2°C

## Storage Humidity

- 30%-80%(non-condensing)

## Storage Temperature

- -22°C-50°C

# Medical Film Printer

Medical inkjet film printer, which receives image datum in Dicom format via CLEAR software, and then output images. With CLEAR specified ink, it can perfectly meet the needs of CR, DR imaging application, and even CT, MRI and other imaging application.



## Product Name

- Medical film printer

## Type

- Epson: L1300, L310, L130, L313
- Canon: G1000, G1010, G1080

## Application Fields

- With black ink: CR, DR, CT, MRI, etc.
- With color ink: B ultrasound, Endoscope, PET-CT, PET-MR, CT 3D reconstruction, etc.

## Spatial Resolution

- 9600×2400dpi

## Media Sizes

- Epson L1300  
8×10in, A4, 10×12in, 11×14in, 14×14in, A3, 13×17in
- Epson L310, L130, L313  
8×10in, A4
- Canon G1000, G1010, G1080  
8×10in, A4

## Media

- Medical dry film (Black Ink)
- Medical color film (Color Ink)

## Film Supply

- By sheet

## Throughput

- 8×10in: 25 sec. per sheet at economic mode

## Ink

- Black Ink: C(2<sup>o</sup>), M(3<sup>o</sup>), Y(4<sup>o</sup>), BK(1<sup>o</sup>), 70mL/bottle
- Color Ink: C, M, Y, BK, BK, 70mL/bottle

## Film Supply

- One supply cassettes containing 50 sheets

## Interfaces

- USB Port: Hi-Speed USB
- Direct Printing Port: Pict Bridge

## Operating Environment

- Temperature: 5°C-35°C
- Humidity: 35%-75%(non-condensing)

## Power

- AC 100-240V~50/60Hz

## Heat Emission

- Printing: About 20W
- Idle: About 1.3W
- Power off: About 0.5W

## Operating System

- Windows XP, Vista, 7, 8, 10

## Processor

- 1GHz

## Explorer

- Internet Explorer 7 or a update version

## Dimensions

- 705mm(L)×322mm(W)×215mm(H)

## Weight

- 12. 2Kg(excluding ink)

# Medical Film Printer

Ultrasound medical film printer (inkjet), using the specified ink provided by CLEAR, prints the matched medical film like ultrasound and PET-CT, then cut automatically. The quality of medical color film meets the medical diagnostic requirements in all kinds of hospitals.



## Product Name

- Medical film printer

## Type

- 361-4

## Application Fields

- B ultrasound

## Spatial Resolution

- 9600x2400dpi

## Media Sizes

- A4, A6

## Media

- Rolling medical color film

## Film Supply

- A6: 375sheets/roll

- A4: 125sheets/roll

## Interfaces

- BNC\*1, USB-B\*1, HDMI, USB-A (2.0)\*2, REMOTE\*1, RJ-45\*1

## Maximum Width

- A4

## Power

- AC 100-240V~50/60Hz

## Operating System

- Windows 7 (32bit)

## CPU

- Intel j1900 2.0-2.42GHz

## Memory

- 2G

## Hard Disk

- 64G

## Media Outputs

- Automatically cut based on the film size by roll printing

## Line Accuracy

- $\pm 0.1\%$

## Ink Supply

- Continuous ink supply system

## Nozzle Number

- 15,360 nozzles

## Heat Emission

- Printing: 1,400W

- Idle: 100W

## Noise

- Printing: <52 db

- Idle: <35 db

## Operating Environment

- Temperature: 10°C-35°C

- Humidity: 35%-75%(non-condensing)

## Storage Environment

- Temperature: 5°C-50°C

- Humidity: 30%-80%(non-condensing)

## Engine Dimensions

- 450mm(L)×355mm(W)×297mm(H)

## Weight

- About 15Kg (excluding ink)

# Multi-function Self-service Printer

SDP-2A will rapidly provide users with complete diagnostic reports printed and radiology films printed, improve the self-service reception capacity of hospitals, and relieve their pressure in the aspect of diagnostic reports printed, radiology films printed, information consultation with medical workers , etc.



## Product Name

- Multi-function Self-service Printer

## Type

- SDP-2A

## Universal Input

- AC100V-240V ~50/60Hz

## Heat Emission

- Printing: 400W
- Idle: 100W

## Noise

- Printing: <52db
- Idle: <35db

## Environment

- Temperature: 15°C-40°C
- Humidity: 10%-80% (non-condensing)

## Engine Dimensions

- 900mm(L)×846mm(W)×1663mm(H)  
(excluding the advertising screen)

## Weight

- 190Kg (excluding ink)

## Timer

- Regularly cut off the machine power

## Parameter of PC Module

- Mainboard: ES-8160U
- CPU: Intel dual-core 2.8GHz
- Memory: 4G
- Hard Disk: 500GB
- Operating System: Windows 7
- Specification of Monitor: 21.5-inch LCD-touch screen
- Network Interface: RJ-45 network interface
- Data Interface: USB2.0×2

## Parameter of Report Printer

- Type of Printer: Lazer printer

- Printing Resolution: 600(horizontal)×600 (vertical)dpi

- Maximum Printing Number: 5,000 sheets
- Paper Supply: Cassette feed
- Paper Sizes: A4, A5, B5
- Maximum Capacity of Paper Feeding  
Cassette: 250 sheets

## Parameter of Film Printer

- Type of Printer: Inkjet
- Printing Resolution: 2400(horizontal)×1200 (vertical)dpi
- Type of Ink: C/M/Y/BK/MBK
- Capacity of Ink Box: 4,000mL×5
- Ink Supply: Continuous ink supply system
- Film Supply: Roll film
- Film Sizes: 8×10in, 10×12in, 11×14in, 14×14in, 14×17in, 14×51in

## Other Customized Configuration

- Infrared Scanner Gun: Support a wide range of specifications for one-dimensional and two-dimensional barcode identification
- Magnetic Card Reader: Bi-directional swiping; support ISO 7811, AAMVA and CA DMV standard card
- Suction Card Reader: Capable of reading a magnetic card, a integrated Circuit card and a radio-frequency Card, which are subject to some related standard
- Inductive Card Reader: Support various Mifare cards complying with the standard of Type A of ISO/14443
- Personal ID Reader: Support the second-generation resident ID card



# Multi-function Self-service Printer

SDP-2C will rapidly provide users with complete diagnostic reports printed and radiology films printed, improve the self-service reception capacity of hospitals, and relieve their pressure in the aspect of diagnostic reports printed, radiology films printed, information consultation with medical workers , etc.

## Product Name

- Multi-function Self-service Printer

## Type

- SDP-2C

## Universal Input

- AC 100V-240V(50Hz)

## Heat Emission

- Printing: 1,500W
- Idle: 100W

## CPU

- Intel dual-core 2.8 GHz

## Memory

- 4G

## Hard Disk

- 500GB

## Specification of Monitor

- 21.5-inch LCD-touch screen
- Resolution of 1,920×1,080 pixels

## Engine Dimensions

- 850mm(L)×612mm(W)×1,763mm(H)

## Environment

- Temperature: 15°C-40°C

- Humidity: 10%-80%(non-condensing)

## Other Customized Configuration

- Report printed: Lazerprinter (Maxmum resolution is 600x600 pixels)
- Thermal Filmprinted Thermal printer (Maxmum resolution:is 508dpi)
- Infrared Scanner Gun: Support a wide range of specifications for one-dimensional and two-dimensional barcode identification
- IC Card Reader: Support all of the typical memory card and logical encryption card
- Magnetic Card Reader: Bi-directional swiping; support ISO 7811, AAMVAand CA DMV standard card
- Inductive Card Reader: Support various Mifare cards complying with the standard of Type Aof ISO/14443
- Personal IDReader: Support the second-generation resident IDcard
- Network Interface: RJ-45network interface
- Data Interface: USB2.0×2



# Medical Film

## Laser Film



### Structure

Composed of the laser layer, PET base material and the protective layer

### Media Sizes

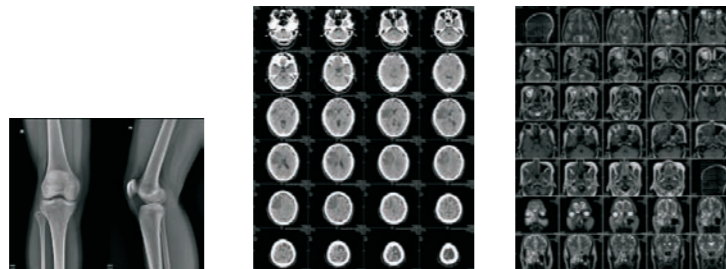
RLF-14x17in  
RLF-11x14in  
RLF-10x12in  
RLF-8x10in

### Specifications

Dmax:  $\geq 3.0D$   
Dmin:  $0.11-0.19D$   
Thickness:  $210 \pm 8 \mu m$   
Haze:  $\leq 20\%$   
Basis-weight:  $280 \pm 8 g/m^2$

### Compatible

CARESTREAM Dryview 5950, 6800, 6850, 6950, 8100, 8150, 8200, 8300, 8500, 8700, 8900



## Thermal Film(A)



### Structure

Composed of the thermal layer, PET base material and the protective layer

### Media Sizes

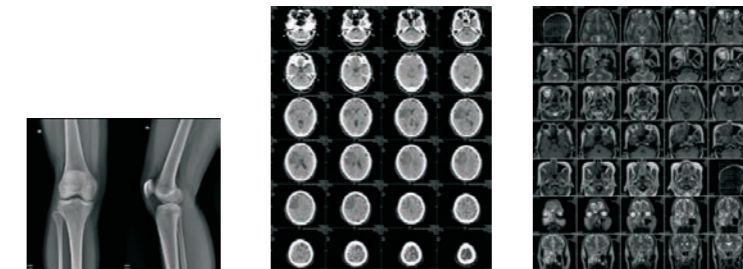
RTF-14x17in  
RTF-11x14in  
RTF-10x12in  
RTF-8x10in

### Specifications

Dmax:  $\geq 3.0 D$   
Dmin:  $< 0.25D$   
Thickness:  $205 \pm 8 \mu m$   
Haze:  $\leq 20\%$   
Stiffness (TD):  $11.0 \pm 2 mN$

### Compatible

AGFA Drystar Axys, 5302, 5503, 5301



# Medical Film

## Thermal Film(F)



### Structure

Composed of the thermal layer, PET base material and the protective layer

### Media Sizes

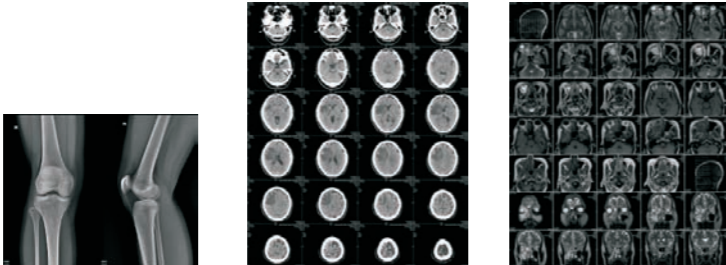
RTF-14x17in  
RTF-11x14in  
RTF-10x12in  
RTF-8x10in

### Specifications

Dmax:  $\geq 3.0D$   
Dmin:  $< 0.28D$   
Thickness:  $200 \pm 5 \mu m$   
Haze:  $\leq 20\%$   
Stiffness:  $10.0 \pm 1 mN$

### Compatible

FUJIFILM Drypix Lite, 3500



## Thermal Film



### Structure

Composed of the thermal layer, PET base material and the protective layer

### Media Sizes

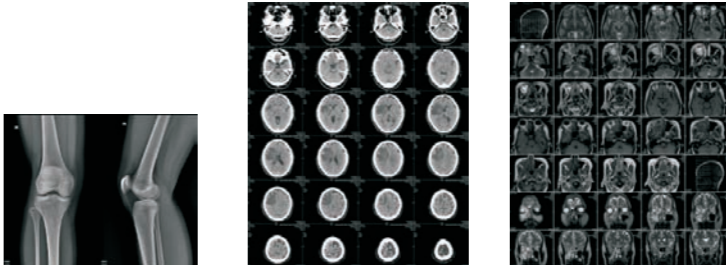
RTF-14x17in  
RTF-11x14in  
RTF-10x12in  
RTF-8x10in

### Specifications

Dmax:  $\geq 3.0D$   
Dmin:  $< 0.26D$   
Thickness:  $204 \pm 8 \mu m$   
Haze:  $\leq 20\%$   
Stiffness(TD):  $10.0 \pm 2 mN$

### Compatible

CLEAR Medical Film Printer 369-1, 369-2





# Medical Film

## Medical Dry Film ( Inkjet )



### Structure

Composed of silver-bearing PET base material and protective layer

### Media Sizes

#### Sheet

RIF-13x17in  
RIF-11x14in  
RIF-10x12in  
RIF-8x10in

#### Roll

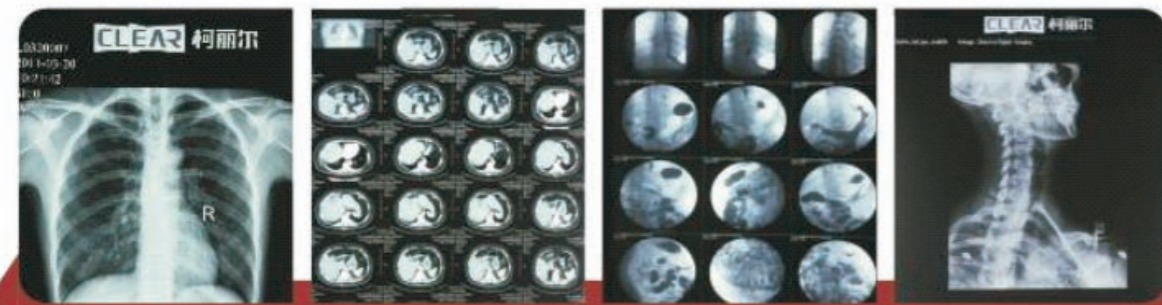
RIF-14x51in RIF-11x14in  
RIF-14x17in RIF-10x12in  
RIF-14x14in RIF-8x10in

### Specifications

Haze:  $\leq 20\%$   
Dmax:  $\geq 3.0D$   
Dmin: 0.11-0.19D  
Thickness:  $210 \pm 8 \mu m$   
Basis-weight:  $280 \pm 8 g/m^2$

### Compatible

Epson, Canon, HP, CLEAR



## Medical Color Film (Inkjet)



### Structure

Composed of MPET base material

### Media Sizes

#### Sheet

WIF-A3  
WIF-A4  
WIF-B5  
WIF-16K

#### Roll

WIF-14x51in WIF-10x12in  
WIF-14x17in WIF-8x10in  
WIF-13x17in WIF-5x7in  
WIF-11x14in

### Specifications

Haze:  $88 \pm 6\%$   
Thickness:  $180 \pm 8 \mu m$   
Basis-weight:  $245 \pm 8 g/m^2$   
Transmission Density: 1.4D

### Compatible

Epson, Canon, HP, CLEAR



# Ink

## CLEAR Specified Ink



### Black Ink

C (2<sup>#</sup>), M (3<sup>#</sup>), Y (4<sup>#</sup>), BK (1<sup>#</sup>), BK (1<sup>#</sup>)

### Color

### Package

70ml/bottle, 5bottles/set

### Support image

CR, DR, CT and MRI

### Compatible Printer

Type E for Epson (L1300, L310, L130, L313)  
Type C for Canon (G1000, G1010, G1080)

### Ink Consumption (1 set of ink)

RIF-8×10in: About 750 Sheets for DR  
RIF-13×17in: About 270 Sheets for MRI

### Color Ink

C, M, Y, BK, BK

70ml/bottle, 5bottles/set

B ultrasound, Endoscope, PET-CT,  
PET-MR, CT 3D reconstruction, etc

Type E for Epson (L1300, L310, L130, L313)  
Type C for Canon (G1000, G1010, G1080)

WIF-A4: About 900 Sheets for Ultrasound

# Software

## CLEAR Specified Software

CLEAR DICOM software is used for primary processing and preservation of medical images in Dicom format. CLEAR provide the DICOM software to clients. It is mainly used in inkjet film printer to print CT, MRI, DR, CR, Ultrasound, PET-CT, etc. and supports DICOM images without compression.

**CLEAR**

Printer Name:  IP:  AE Title:  Port:

Printer Name	IP	AE Title	Port	Operation
Epson	192.124.121.11	CLEAR	104	<a href="#">Start</a>

### DICOM Viewer Run

- Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10
- Available for x86 and x64 platforms