

# A Sony Digital Radiology Imager for every facility and every body

In today's digitised Radiology environment, hard-copy imaging remains a valuable and often irreplaceable diagnostic and communication tool. Why invest in large all-in-one imagers when you know you'll never use most of their capabilities? Sony takes a different approach, offering small, personal, dedicated imagers that maximise quality and performance while minimising space and wastage.

Our latest range of Digital Radiology Imagers are dedicated for specialist applications and designed for monochrome, paper, colour and blue film hard copies. This gives you the freedom to pay only for what you need and benefit from the lowest possible capital investment and running costs. More importantly, Sony Digital Radiology Imagers combine excellent reliability with high speed on-demand printing, market-leading image quality and compact styling. All designed to improve your workflow and efficiency for enhanced patient care.



# UP-DF550

The Sony UP-DF550 FilmStation, Dual Tray Imager is a unique multi-film Imager built on the design platform of the UP-DF500 FilmStation imager. It incorporates many of the same unique features of the UP-DF500 model and adds a second output tray to accommodate multiple film sizes including 8 x 10, 10 x 12 and 11 x 14 inch. This added feature gives users the built-in capability to produce hard copies for a variety of modalities, as well as low-cost copies ideal for patient referrals. The UP-DF550 can be mounted horizontally or vertically, which is a major advantage over other large centralised film imagers. The UP-DF550 Dual Tray Film Imager is an ideal choice for many modalities such as CT, MRI, DR, CR, and general X-Ray.





## Two film supply trays to accomodate multiple film sizes

The UP-DF550 Film Station – while retaining nearly the same compact body size as the UP-DF500 – supports four different film sizes;  $14 \times 17$ ,  $11 \times 14$ ,  $10 \times 12$  and  $8 \times 10$  inch Sony Blue Thermal Film. These various print sizes make it suitable for a variety of diagnostic modality printing tasks. The UP-DF550 is equipped with two film supply trays, each with a capacity of 125 sheets. The upper tray is exclusively for  $14 \times 17$  inch films, while the lower tray is applicable for all other sizes. The Imager is also equipped with an output tray to sort out into  $14 \times 17$  inch film prints and all other sizes. This makes it easy for users to locate the printed films they need, quickly and easily.

#### Flexible installation and space-saving design

Thanks to an innovative printing mechanism, the UP-DF550 has a compact design with approximate dimensions of 600 (W) x 316 (H) x 686 (D) mm and a weight of only 63 kg. The printing mechanism also enables the UP-FD550 to be oriented vertically as well as horizontally. The footprint is one of the smallest in its class at only  $686 \times 316$  mm, which is almost same as the UP-DF500 when it is placed vertically. A vertical installation is ideal when space is limited or the unit must be integrated into your CT or MRI control room, mobile coach, or military ship etc. Plus, you can easily move the UP-DF550 using the bundled carts, which are equipped with rollers.

#### > Network parameter settings



#### > Easy maintenance



### Features

#### Easy network parameter settings

Network settings such as an IP address can be easily controlled via the front panel of the UP-DF550 without having to use any other tool, such as a Windows® PC or web browser.

### Large effective print area and edge-to-edge printing

The UP-DF550 can print edge to edge on the horizontal plane – with a small margin at the top and bottom of the film. Thanks to a new film transportation mechanism, the UP-DF550 realises a larger print area than the UP-DF500.

#### Edge-to-edge printing

#### Fast throughput

The UP-DF550 can reproduce precise diagnosis images at a productive rate of up to 70 sheets of film per hour on 14 x 17 inch (354 x 430 mm) thermal film. When printing on the smallest 8 x 10 inch size film, the Imager can produce up to 80 sheets of film per hour.

#### Rear cover for easy maintenance

The UP-DF550 is equipped with two rear covers that give you easy access to fix film jams easily.

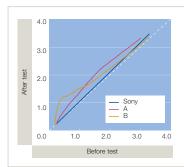
#### Gamma curve settings

The UP-DF550 has a capability of gamma curve settings to reproduce the exact gray scale contrast which users want. The UP-DF550 can save the default fixed gamma curve and 19 changeable gamma curves to get the best fit gray scale contrast from multiple modalities.

#### DICOM connectivity

In accordance with worldwide medical imaging communications standards, the UP-DF550 is equipped with a DICOM interface, which enables it to be connected to a hospital imaging network.

#### > Optical density



This chart shows the optical density measured\* through a sheet of UPT-517BL Sony Blue Thermal Film. It is virtually unchanged even after exposure in high-temperature and high-humidity conditions. This means that the original image maintains its integrity even in adverse environments.

\* Test condition: 60°C / 7 days.

#### Quick warm-up time

From the moment it is turned on, it takes only two minutes before the UP-DF550 is ready to start printing. This makes it effective in emergency use.

#### Dust-resistant mechanism

To prevent dust particles and other foreign matter drawn through the cooling fans from accumulating onto the film, the UP-DF550 has been designed with two completely separate sections, an electronics section and a mechanical section. In addition, the area of contact between the thermal head and the film is totally isolated from those air flows. To further prevent foreign matter from damaging your prints, the film remains inside the UP-DF550 until the printing process is completed. If dust particles do come to rest on the film pass, a dust cleaning roller positioned in front of the thermal head cleans the surface of film before printing. Since the dust cleaning roller is disposable, users can easily replace it when it becomes dirty.

#### Environmentally friendly

The UP-DF550 adopts a totally environmentally friendly printing system. No liquid chemical is used in the printing process and no chemical waste is produced after printing. Furthermore, Sony thermal film doesn't contain any metal component like silver. So it can be treated as household waste, rather than as industrial waste.

#### Reliable Sony Blue Thermal Film

The Sony Blue Thermal Film has been especially designed for use with the Film Station to provide high-contrast and high-density images with higher durability. By reproducing precise and stable diagnostic images, medical examiners can make accurate medical assessments. Additionally, unlike conventional film, it can be handled in daylight. This allows you to easily perform all necessary procedures, – from refilling films to printing images – in any hospital environment.

The IC tag is implanted into the protection sheet of the film. By reading the IC tag data, the UP-DF550 recognises the remaining quantity of films.

### UP-DF550 Specifications

Printing system	Direct thermal printing
Resolution	320 dpi
Processing data depth	12 bit processing
Effective print pixels	5,232 (H) x 4,360 (W) dots
Gradations	4,096 levels
Throughput	Approx. 64 sheets per hour (when printing on 14 x 17 inch film)
Film supply tray	Two trays (one for UPT-517BL, one for UPT-514BL, UPT-512BL, UPT-510BL)
Film supply tray capacity	125 sheets per tray
Media size	14 x 17 inch, 14 x 11 inch, 10 x 12 inch, 8 x 10 inch
Maximum print size	415.3 x 346.1 mm (UPT-517BL)
Interface	DICOM (RJ-45 modular jack)
Power requirements	AC 100 to 240 V, 50/60 Hz
Power consumption	4.4 to 1.8 A
Time from power-on to ready	Approx. two minutes
Operating temperature	10 °C to 30 °C (50 °F to 86 °F)
Operating humidity	20% to 80% (no condensation allowed)
Dimensions	600 (W) x 316 (H) x 686 (D) mm (23 % x 12 ½ x 27 ½ inches)
Mass	Approx. 63 kg (approx. 138 lb 14 oz)
Supplied accessories	Film supply trays (2), Output tray (1), AC power cord (1), Before Using This Imager (1), Cleaning kit (1), Instruction manual (CD-ROM), Carts with rollers (2), Stopper sheet for carts (1), Warranty card (1)
Safety regulations	UL60601-1, CSA C22.2 No.601.1 FCC/IC Class A Digital Device EN60601-1 EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3 IEC60601-1

### Optional Accessories

#### UPT-517BL

Blue Thermal Film

Contents: 125 sheets of print film Paper size: 354 x 430 mm (14 x 17 inches)



#### UPT-512BL

Blue Thermal Film

Contents: 125 sheets of print film Paper size: 253 x 304 mm

(10 x 12 inches)



#### UPT-514BL

Blue Thermal Film

Contents: 125 sheets of print film

Paper size: 279 x 354 mm

(11 x 14 inches)



#### UPT-510BL

Blue Thermal Film

Contents: 125 sheets of print film

Paper size: 202 x 253 mm

(8 x 10 inches)



© 2007 Sony Corporation. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Features and specifications are subject to change without notice. All non-metric weights and measures are approximate. Sony is registered trademarks of Sony Corporation.

Film Station is a trademark of Sony Corporation. Windows is registered trademarks of Microsoft Corporation. All other trademarks are the property of their respective

CA UP-DF550/GB- /04/2007

### SONY