The DRYSTAR 4500 is a high-resolution, high-throughput dry hardcopy system that is the perfect partner for the ADC Compact Plus and ADC Solo.

Imaging right where you need it
The DRYSTAR 4500’s small footprint and its low investment cost mean you can print your films right where you have always wanted: next to you! There will always be room for this floor-standing unit to stand next to the application it serves in even the most space-restricted environment.

Cutting-edge direct thermal printing
With the DRYSTAR 4500, you benefit from the latest developments in direct thermal printing technology. The 10” wide print-head, combined with sophisticated image processing software and an on-line densitometer for consistency of image quality, delivers superb image quality from first to last pixel. The DRYSTAR 4500 has a high resolution of 508 pixels per inch. This makes it particularly well-suited to CR and DR applications, which make very high demands as regards image quality. It is a perfect match for the Agfa ADC Compact Plus and ADC Solo.

The TL direct thermal imaging films used by the system are available in blue base (TM 1 B) or clear base (TM 1 C), and are composed of a 175 micron thick PET base, coated with silver salts and a protective top layer. The PET base with rounded corners ensures that the films can be handled in the same way as regular X-ray films. The silver-based imaging layer, which is not sensitive to light, but only to very high temperatures, guarantees low fog and high contrast, combined with excellent image stability. Finally, the protective top layer makes the film resistant to scratches and moisture. In short, precisely the combination of imaging fidelity and physical robustness that is needed in the hospital environment.

Designed for your ease of use
The DRYSTAR 4500 printer excels in simplicity. There is no need for special film supply magazines or light-protective packaging. Films are loaded via input trays that are conveniently located at table-top height at the front of the unit. And because this is a dry imager, loading may be performed in broad daylight. The output tray is positioned on top of the printer, also at table-top height for easy and ergonomic access.

Another design feature that cuts down on hassles is the very straight film path, which strongly decreases the likelihood of film jams. And in the unlikely event of a jam arising, it can be cleared very easily from the front, as the printer top and front can be opened for access to the complete film path. No need to wait for a trained engineer.

Systematic reliability
The dependability of the DRYSTAR goes further. Agfa’s direct thermal print technology, unlike laser-based systems, does not contain rotating or moving parts, and that means that the system as a whole is reliable – by design.

Connectivity
The DRYSTAR 4500 may be used to serve just one application if so desired, but it also features functional modularity. Designed as a DICOM network printer and equipped as standard with a (fast) ethernet connection, it also integrates flawlessly into the Agfa network environment. Postscript is available as an optional extra. Point-to-point video is possible thanks to Paxport, as are digital interface connections to modalities without DICOM. And of course, the DRYSTAR 4500 integrates smoothly into the Impax environment.
Dual film sizes on line
The printer has two film trays each of which can hold 100 films. The top tray can hold 8 x 10" film, while the bottom tray can be configured either for 8 x 10" or 10 x 12", to increase the input capacity, or for 10 x 12" film, making two on-line film sizes possible.

Savings on film costs
With its high-resolution 508 dpi, the DRYSTAR 4500 can print the complete bitmap of a scanned 14 x 17" ADC plate on a 10 x 12" film without losing any information. In this way, you can save on film costs for those applications not demanding "true size" images.

Internal hard disk
The printer is equipped with an internal high-capacity hard disk (4 Gbyte or higher) for print job spooling. Thanks to this spooling disk, modalities can send their print jobs at any time, and there will be no need for a modality to have to wait because it cannot send its print jobs.

General
Dimensions
55 x 72 x 92 cm (W x D x H)
Weight
95 kg
Power requirements
Auto ranging 100 – 240 V: 50/60 Hz
Power consumption
Average: 300 Watt
Peak: 530 Watt
Film supply trays
Upper input tray 8 x 10", 100 sheets of film
Lower input tray configurable for 8 x 10" or 10 x 12", 100 sheets of film
Operating conditions
Temperature: 10 – 35 °C
Humidity: 10 – 80% RH, non-condensing
Storage / Shipping conditions
Temperature: -25 °C to +55 °C (+70 °C for transport)
Humidity: 10 – 95% RH, non-condensing.
Heat dissipation
Standby power: 100W / 360kJ/h
Average printing power: 300W / 1080kJ/h
Peak power: 530W / 1908kJ/h
Safety:
FDA 510k
IEC 601-1
IEC 601-1-1
UL2601
CSA 22.2 no. 601.1-M90
VDE 0750
DOH

Performance
Throughput
8 x 10": 70 films/hour (45 sec per film);
access time first film: 90 sec.
10 x 12": 50 films/hour (60 sec per film);
access time first film: 120 sec.
Addressable print area
8 x 10": 3832 x 4844 pixel
10 x 12": 4844 x 5856 pixel
Printing resolution
Geometrical: 508 ppi
Contrast: 8/12 bit contrast resolution
Connectivity
Ethernet TCP/IP, FTP, Telnet, HTTP, SNMP, SMTP, LPD
Image formats: DICOM, TIFF, and optional Postscript®

Technical data
Film
Film types
Direct thermal TM 1 B blue-base film
TM 1 C clear-base film
Film sizes
Two on-line film sizes possible: 8 x 10" and 10 x 12"

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