FDR D-EVO
Indirect conversion FPD system for general X-ray exposure
DR EVOlution has come.

**High-quality image for FPD.**
By Fujifilm’s new proprietary technology "ISS method", both MTF and DQE are improved. The FDR D-EVO has realized high-quality image utilizing its new technology "ISS method" combined with proven image processing technology.

**FUJIFILM’s new proprietary technology "ISS method" FPD**

**Conventional method**
Back side focus method

- X-ray
- TFT panel reads the luminescence light from the back side after the light is attenuated and diffused. Thus, both MTF and DQE are sacrificed.

**FUJIFILM’s new method**
Front side focus method

- X-ray
- By reading from the front side, collecting the luminescence light before its attenuation and diffusion is available. This realized result in improvement of MTF and DQE.

The "ISS method" provides high sharpness image even with low dose
The main characteristic of FUJIFILM’s new proprietary technology "ISS method" is realized by placing the TFT sensor on the front side of the scintillation layer where the TFT sensor of an existing panel is located on the back side. By using this new method, scattering/reduction of X-ray signal is significantly improved (resulting in improved MTF). Also, optimization of the scintillation layer of the panel is achieved by FUJIFILM’s own precision coating technology cultivated by manufacturing Imaging Plate(IP) for many years (resulted in improvement of DQE).
Introducing DR system is available with existing X-ray equipment.

1 panel solution
Since the 14mm thick, 384×460mm size the FDR D-EVO is equivalent to a CR cassette, it can be loaded into an existing upright/table exposure system. Also, the FDR D-EVO weighs 2.8kg which is nearly as light as a CR cassette (including IP, 2.1kg), thus achieves friendly usability for customers.

Supporting various positions by table-top exposure
Knee joint axial
Wheelchair exposure
Stretcher exposure
Abdomen lateral decubitus
Knee joint lateral
Cubital joint lateral

Using one Console Advance, both D-EVO and FCR are controllable with same usability.

FDR D-EVO and FCR are simultaneously connectable, thus achieves effective use of space in the exposure room.

Optimized workflow is realized by unifying the operabilities and eradicating the duplicate operations.

By unifying the image processing method, CR format equivalent image can be generated by the FDR D-EVO. Thus, image taken by the FDR D-EVO can be managed commonly with FCR image.

Console Advance

Knee joint axial
Wheelchair exposure
Stretcher exposure
Abdomen lateral decubitus
Knee joint lateral
Cubital joint lateral

SPEEDY AND EFFICIENT WORKFLOW

Unparalleled speed improving workflow
Scenario: 2 consecutive exposures operated by one person

First exposure(Chest, front)

View image①

Patient’s position can be verified immediately after the exposure

Changing patient’s position

Second exposure(Chest, lateral)

View image②

Workload of exchanging and inserting the cassette is unnecessary. Thus, operation workload and time can be reduced greatly.

Total time: Min.12 sec.

Image Intelligence™ is the result of FUJIFILM’s many years of achievements in field of medical imaging, it realizes high-quality image for diagnosis.

MFP Multi-frequency Processing
Enhances FCR images. All diagnostic scopes will be enhanced except for noise.

FNC Flexible Noise Control
Provides a non-grainy image by mainly isolating and suppressing the noise for the signal.

GPR Grid Pattern Removal
Removes the stationary grid patterns thus preventing Moiré from being generated resulting in easier diagnosis.
FDR D-EVO Specifications

Standard components and model name: Digital Radiography with flat panel detector DR-ID 600

Product name: FDR D-EVO (MODEL: DR-ID 600)

<Components>
- Flat panel sensor: DR-ID 600SE
- Power supply unit: DR-ID 600MP
- Control cabinet: DR-ID 600MC
- Image processing unit: DR-ID 300CL

Processing capacity:

1. Start-up speed
   - At normal operation:
     - 6 min. or less: when connecting only one flat panel sensor
     - 8 min. or less: when connecting two flat panel sensors
   - At emergency mode:
     - 3 min. or less: when connecting only one flat panel sensor
     - 3.5 min. or less: when connecting two flat panel sensors

2. Image display speed
   - Preview display speed: minimum 3 sec.
   - Processed image display speed: 8 sec. or less (after exposure)

3. Exposure interval
   - Front chest (120kV 4mAs ~ approx. 20mR) — minimum 9 sec.
   - Front cervical (approx. 55mR) — minimum 3 sec

4. Film output time: Approx. 80 sec. (Reference value)
   - with DRYPIX7000 console advance

Exposure size:
- 2304 × 2880 pixels

Image reading:
- Reading grayscale level: 16 bit/pixel
- Pixel size: 150μm

X-ray detector: Indirect-conversion system flat panel X-ray detector DR-ID 600SE
- Maximum film size: 2304 × 2880 pixels
- Scintillator: GOS (Gd2O2S)

Power supply conditions: FDR D-EVO
- Rating: Single phase 50/60Hz
- AC100V-AC240V (+/-10%)
- 1.0kVA or less

* Refer to "Console Advance Product Specifications" for the power supply condition of Console Advance.

Power consumption:
- Operating: 80W (with only one of the flat panel sensors operating)
- Standby: 60W
- Applying current: 15 W (at only power supply unit is ON)

* When two flat panel sensors are connecting

Environmental conditions:
- Operation conditions
  - Temperature: 15°C to 30°C
  - Humidity: 15% to 80% RH (Non condensing)
  - Atmospheric pressure: 700hpa to 1,060hpa
- Temperature and humidity conditions on operating Operatingconditions
  - Not operating condition
    - Temperature: 5°C to 35°C
    - Humidity: 10 to 80%RH (Non condensing)
    - Atmospheric pressure: 700 to 1,060hpa

Dimensions and weight

<table>
<thead>
<tr>
<th>Width (mm)</th>
<th>Depth (mm)</th>
<th>Height (mm)</th>
<th>Weight (kg)</th>
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</thead>
<tbody>
<tr>
<td>460</td>
<td>384</td>
<td>14</td>
<td>Approx. 2.8kg*</td>
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Optional parts
- Remote switch

External appearance and specifications are subject to change without notice.
All brand names or trademarks are the property of their respective owners.
All products require the regulatory approval of the importing country.
For details on their availability, contact our local representative.
Please contact FUJIFILM's authorized distributor for FDR D-EVO X-ray system.