

***FDR D-EVO III***  
***G35i | G43i***

Leading the Flow of Technology

***CenQuip®***

Next generation imaging

Approx.

1.8 kg  
LIGHTWEIGHT

\*14 x 17 inch model, without the battery



G35i [14"×17"model]

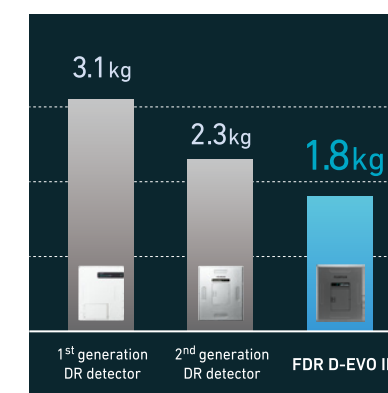
G43i [17"×17"model]

## An Evolution of Form and Function

The ever lighter FDR D-EVO III is introduced with our flexible film-based TFT detector, providing high image quality with low X-ray dose. FDR D-EVO series will never stop evolving to improve the workflow in various clinical scenes.

### The lightest FPD at 1.8kg\* with FUJIFILM's flexible film-based TFT detector

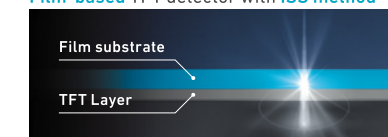
Replacing the glass-based TFT detector with thin film, FDR D-EVO III is the lightest FPD available at 1.8kg\*. Compared to the 1st generation FDR D-EVO, FDR D-EVO III is about 40% lighter. \*excludes battery pack



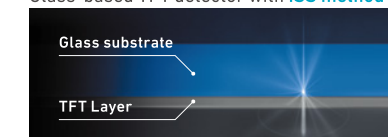
### Higher DQE 33% (1Lp/mm-RQA5 1mR)

Higher Quality with DQE 33% (1Lp/mm-RQA5 1mR)

#### Film-based TFT detector with ISS method



#### Glass-based TFT detector with ISS method



### Robust sensor to endure tough medical environments

The new flexible film-based TFT detector, compared to our previous FDR D-EVO models, decreases the risk of fracture of TFT detector caused by external shock.



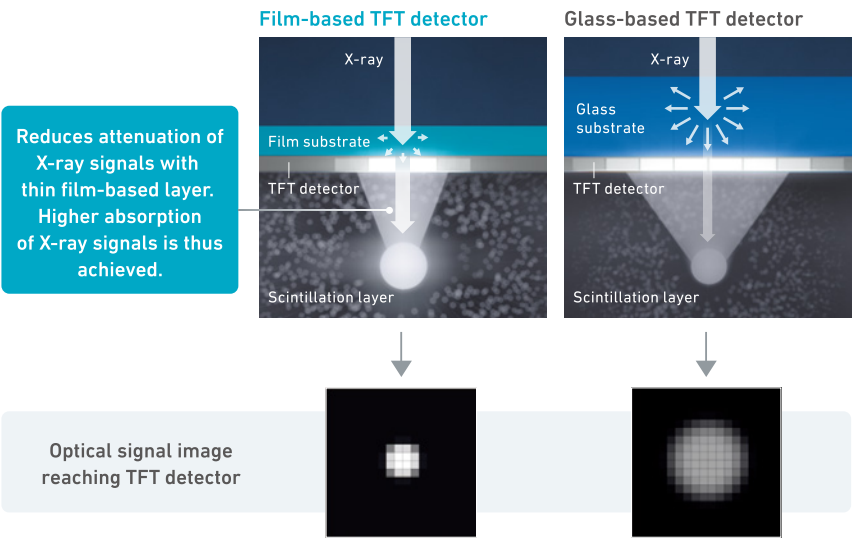
# High quality image & Low Dosing

## ISS system reading technology promotes higher sensitivity

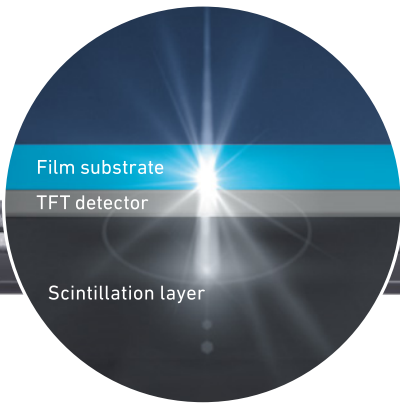
Like FDR D-EVO II, FDR-D-EVO III is Equipped with an indirect conversion system called the ISS method which bonds optical sensors (TFT) to the X-ray irradiation side unlike traditional flatpanel detectors. This greatly suppresses scattering and attenuation of X-ray signals, creating a sharp image with low X-ray dose.

### Synergism between ISS method and flexible film-based TFT detector

By changing the TFT detector of FDR D-EVO III from glass-base to film-base, X-ray transmittance is improved compared to FDR D-EVO II. FDR D-EVO III achieved DQE 33% from 31% (1 Lp/mm - RQA5 1 mR) by applying a flexible film to a base of the device detector. This unique technology combination is only possible with proprietary ISS technology to fully implement the benefits of film-based detectors.

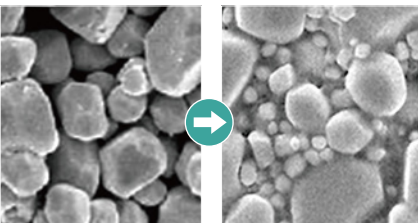


DQE 33%



### Blending large and small phosphor particles at an optimal ratio

Increased X-ray absorption through our uniquely designed scintillator, which applies photographic film technology to optimize the blending ratio of phosphor particles of different sizes.



Blending optimally-sized phosphor particles in gaps

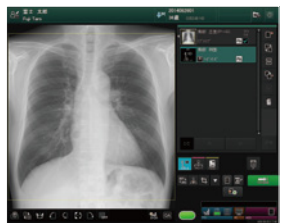
### Fujifilm noise reduction circuit improves detector sensitivity in high absorption regions

The uniquely developed noise reduction circuit reduces noise in the image. This noise reduction circuit realizes DQE 33% even at 1 mR. The granularity of low- concentration regions is improved.



### Image processing technology to optimize imaging results

FDR D-EVO III utilizes the latest Fujifilm digital image processing technologies including Dynamic Visualization, which optimizes image display based on monitor characteristics and FNC noise suppression processing that improves image quality, automatically extracting and separating noise components in the image.



# High-level protection

## Waterproofed and dust-proofed



Structured to prevent the infiltration of liquids, the device conforms to IPX6 and can withstand jets from any direction\*. There is no need to worry for fluid permeation inside the device caused by fluid like blood or vomit. The device also complies with IP5X for dust-proof structure, preventing malfunction caused by small particles\*.

\*These effects cannot always be guaranteed in the future for its product characteristics.

## Easy-to-clean flat shape

The FDR D-EVO III introduces a flat design and reduced contours, promoting easier and more efficient cleaning.

Dust-proofed IP5X

Waterproofed IPX6

## High durability frame structure — 310kg load capacity

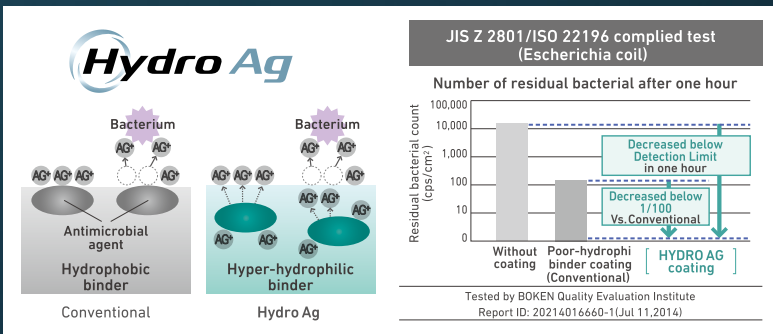
Forging frames constructed with Mg-Li alloy provides robust protection for internal devices, while maintaining a lightweight design. With this technology, FDR D-EVO III has a 310kg load capacity.



## Hydro Ag antibacterial coating

The FDR D-EVO III detectors are coated with Hydro Ag antibacterial coating, which has an antibacterial effect 100 times greater than that of conventional Ag coatings. This longer-lasting higher intensity antibacterial effect prevents bacterial growth. A hyper-hydrophilic binder allows easy cleaning and hygienic use, together with the easy-to wipe flat design of the detector.

\* Due to the characteristics of the product, the effect is not guaranteed in the future.



## Versatile functionality

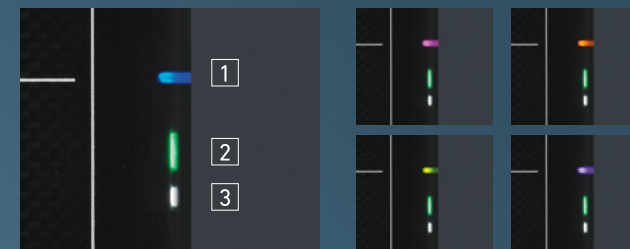


### Peripheral devices for effortless handling

Battery charger, docking stand, power supply unit and power box for FDR D-EVO II can also be operated with FDR D-EVO III, for improved usability and easier handling.

### LED lamps on the front of device for better visualization

LED lamps are equipped on four sides of the front of the detector, for a visual assistance.



#### 1 Centralizing the device and distinguishing devices

Equipped with side-center LEDs on four sides of the detector, for easier positioning of the device during imaging. There are five LED colors (blue, pink, orange, lime-yellow and purple), to distinguish different devices for different colors when using multiple devices.

#### 2 Device status displayed in green

When the device is ready for X-ray exposure, the LED lights up in green.

#### 3 Front side identification in white

It lights up in white to identify the top-side and bottom-side of the detector.

### Simple battery replacement workflow

The battery can be replaced with one hand.



### Easy insertion with shell designed edge

The curved, shell designed edges are employed on both sides of the panel. The curved corners allow for an easier insertion into patient beds. The easy-to-grasp shape assists to pick up even when placed on a flat surface, improving task efficiency.



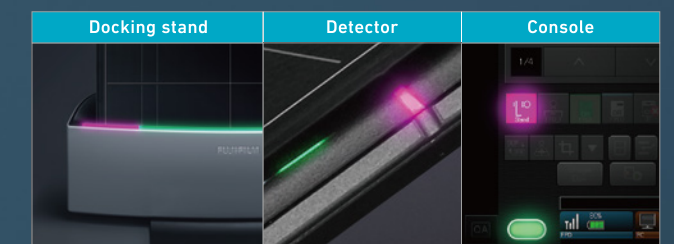
### Internal memory for independent imaging Easy-to-read battery status display

Up to 100 images can be stored in the panel's internal memory. The LED display shows the number of stored images along with the battery status. You can check that information even when the panel is being used on its own.



### Works together with the console to display the detector status

The docking stand works together with the console to display the detector's "Ready" status and identify color using the LEDs. This makes it easy to check the current state of the detector even from far away.

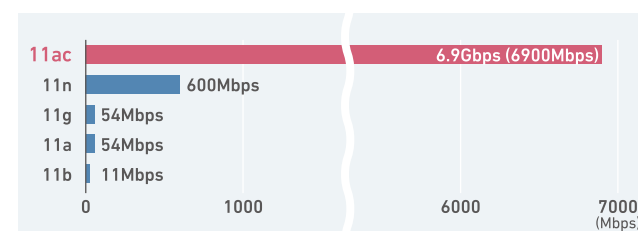


## Improved handling

### Suitable for outdoor use with an expanded spectrum

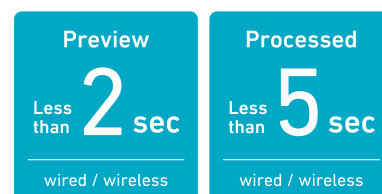
FDR D-EVO III is compatible with 2.4 GHz and 5GHz (W52/53/56)\* spectrum, making the device suitable for outdoors use. Also, the device supports IEEE802.11 ac, the new high-speed wireless LAN.

\*Wireless band is allowed to be used depending on the regulation of each country.



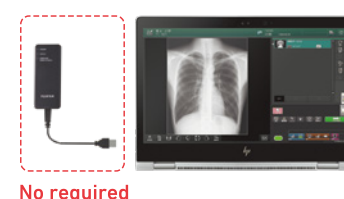
### Improved throughput

Image display speed and cycle time has been improved approximately by 1.5 seconds when wirelessly connected, as compared to our previous FDR D-EVO models.



### Small AP is no longer required

The small AP required for previous mobile solution is not necessary for the FDR D-EVO III. With just the panel and mobile console, high mobility can be achieved.



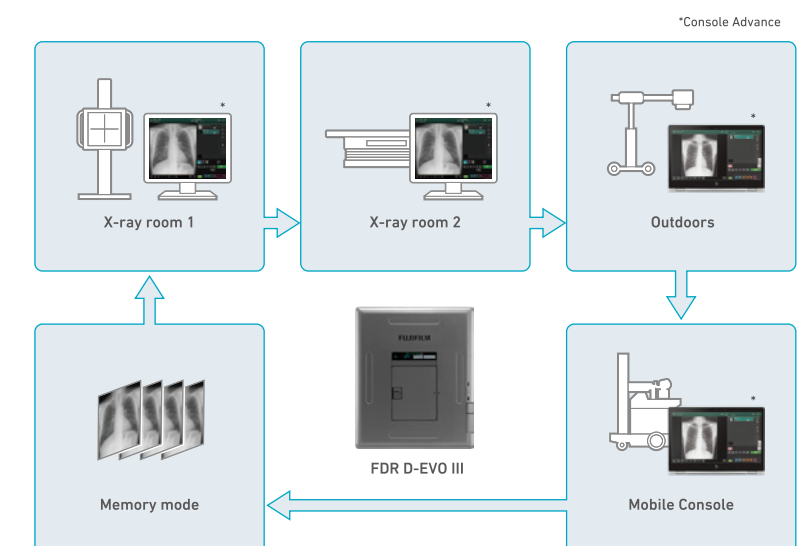
### Easier transition between systems

FDR D-EVO III enables users to select and switch between systems simply by pressing the button on the back of the panel.



### "SmartSwitch" Technology

Fujifilm developed a technology "SmartSwitch" which allows automatic X-ray detection. With SmartSwitch, FDR D-EVO III no longer requires connection between the X-ray generator and DR power supply unit to automatically detect X-rays and start image creation.



\*Console Advance

## Advanced image processing

\*These image processing is achieved with Console Advance.

3D structure analysis technology to support mobile exam

### Virtual Grid

Provides a high quality image without using a grid

Virtual Grid processing corrects for the effects of scatter radiation. Without the need for a grid, Virtual Grid retains high contrast and image sharpness, while preventing the asymmetric density resulting from misalignment of X-ray tube and detector. (Option)



Virtual Grid



No Grid



Virtual Grid



Real Grid

Multiple body parts supported



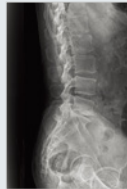
Abdomen



Cervical Spine



Thoracic Spine



Lumbar Spine

### Dynamic Visualization II

Optimizes image quality using latest Exposure Data Recognizer

Advanced recognition algorithms automatically adjust contrast and density for individual body parts based on calculation of estimated 3D image data. (Option)



Dynamic Visualization II



Conventional Processing



Dynamic Visualization II



Conventional Processing



Dynamic Visualization II

## Specification

|                         | FDR D-EVO III G35i                                                                                                               | FDR D-EVO III G43i                                                                                                                  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Product name            |                                               |                                                  |
| Model name              | Flat Panel Detector (DR-ID 1831SE) for FDR D-EVO III System (DR-ID 1800)                                                         | Flat Panel Detector (DR-ID 1832SE) for FDR D-EVO III System (DR-ID 1800)                                                            |
| Type                    | Cassette type detector with ISS (Irradiation Side Sampling) and flexible film-based TFT detector                                 | Cassette type detector with ISS (Irradiation Side Sampling) and flexible film-based TFT detector                                    |
| Scintillator            | GOS (Gadolinium oxysulfide)                                                                                                      | GOS (Gadolinium oxysulfide)                                                                                                         |
| Detector external size  | 460 × 384 × 15 mm (Approx.) [18" × 15" × 0.6"]                                                                                   | 460 × 460 × 15 mm (Approx.) [18" × 18" × 0.6"]                                                                                      |
| Weight                  | Approx. 1.8 kg (excludes battery pack)                                                                                           | Approx. 2.1 kg (excludes battery pack)                                                                                              |
| Pixel pitch             | 0.15 mm                                                                                                                          | 0.15 mm                                                                                                                             |
| Pixels                  | 2836 × 2336 pixels                                                                                                               | 2836 × 2832 pixels                                                                                                                  |
| Wireless standard       | IEEE 802.11n, IEEE 802.11ac (2.4 GHz, W52/W53/W56)                                                                               | IEEE 802.11n, IEEE 802.11ac (2.4 GHz, W52/W53/W56)                                                                                  |
| Image preview           | Less than 2 sec (wired/wireless)                                                                                                 | Less than 2 sec (wired/wireless)                                                                                                    |
| Cycle time              | Less than 7 sec (wired/wireless)<br>Less than 8 sec (SmartSwitch)                                                                | Less than 7 sec (wired/wireless)<br>Less than 8 sec (SmartSwitch)                                                                   |
| Battery recharging time | Approx. 3 hours (with battery charger)<br>Approx. 4 hours (with Docking Stand)                                                   | Approx. 3 hours (with battery charger)<br>Approx. 4 hours (with Docking Stand)                                                      |
| Battery                 | Battery Pack<br>Battery weight approx. 220 g<br>performance<br>Sleep mode: Approx. 8 hours<br>Extra sleep mode: Approx. 20 hours | Battery Pack S<br>Battery weight approx. 180 g<br>performance<br>Sleep mode: Approx. 6.5 hours<br>Extra sleep mode: Approx. 16 hour |

## Optional parts

|                                                                                       |                                                                                       |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |
| MP box (DR-ID 1200MP)                                                                 | Docking stand (DR-ID 1200DS)                                                          |
|  |  |
| Power-Box (DR-ID 1200PB)                                                              | Battery charger (Li-ion Battery charger)                                              |
|  |  |
| Battery Pack (Li-ion Battery [125Y200038])                                            | Battery Pack S (Li-ion Battery [125Y200055])                                          |

•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 flat panel detector system.

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