

The essentials of Fujifilm's high sensitivity acquisition technologies and refined image processing.

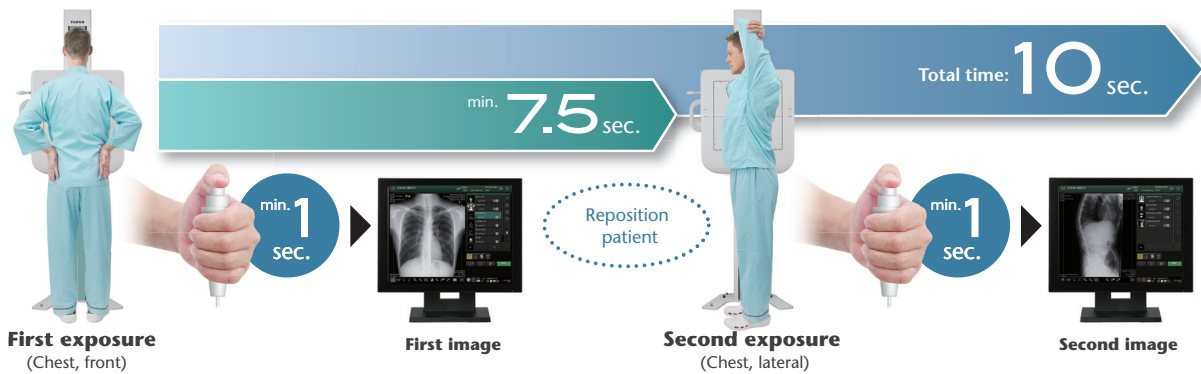
*CenQuip*<sup>®</sup>

**NEW**  
**FDR ES**  
14G | 17G | 14C | 17C

# Enhance your workflow with Fujifilm's latest DR detector and image processing



Fast, easy integration with any x-ray room to transition to the speed, image quality and dose benefits of Fujifilm Digital Radiography.



## Protection and durability

Innovative design enhances ease of use and reliability in x-ray environments.

- Carbon fiber frame with rounded edges and smooth corners creates a durable design
- IPX3 rating provides an extra safeguard during use and cleaning
- Single-handed battery replacement is ready to image in 30 seconds



Single-handed battery

### ■ Csl detectors



FDR ES 14C  
[14"x17" FDR ES C35]

FDR ES 17C  
[17"x17" FDR ES C43]

### ■ GOS detectors

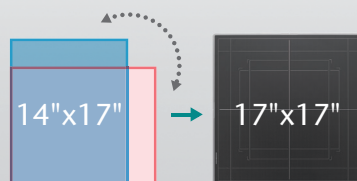


FDR ES 14G  
[14"x17" FDR ES G35]

FDR ES 17G  
[17"x17" FDR ES G43]

## 17"x17" format eliminates unnecessary handling

The large exposure area of a 17"x17" detector accommodates portrait and landscape without rotating it in the Bucky, minimizing handling and simplifying positioning.

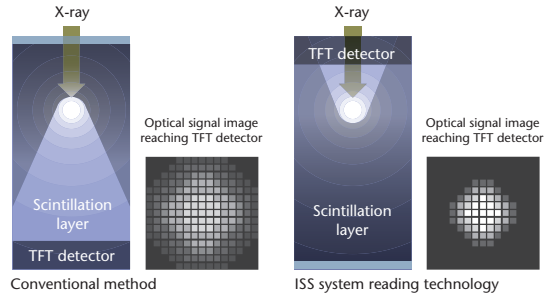


## Fujifilm's exclusive technology for high resolution and low dose

### ISS capture technology promotes high sensitivity

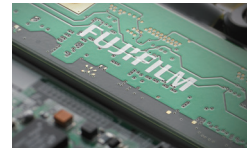
Equipped with Fujifilm's proprietary Irradiated Side Sampling (ISS) technology, which positions its capture electronics (TFTs) at the irradiation side, in contrast to traditional detectors. This design significantly suppresses scattering and attenuation of x-ray signals, improving efficiency to produce sharper images at lower doses compared to traditional designs.\*

\* Based on higher MTF and DQE demonstrated in "Effect of X-ray incident direction and scintillator layer design on image quality of indirect conversion flat-panel detector with GOS phosphor" by K. Sato, et al.



### Noise Reduction Circuitry improves detector sensitivity in high absorption regions

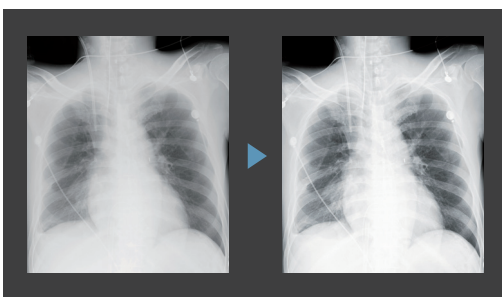
A unique, Fujifilm innovation in noise reduction circuitry maximizes signal strength to improve image quality in high absorption areas. This enhancement achieves 1.7 times the DQE of previous models, with as little as 0.03mr dose. Visibility of dense areas such as the heart and mediastinum are greatly improved.



### FDX Console refined image processing provides exceptional images

Simple, efficient workflow and image processing deliver high diagnostic value with minimal patient impact.

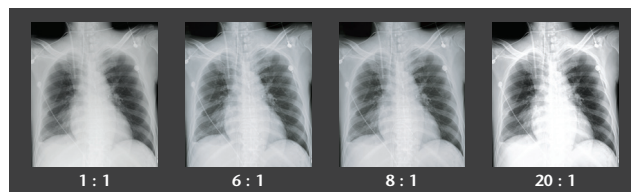
#### Virtual Grid



No Grid

Virtual Grid

Virtual Grid intelligent image processing corrects for the effects of scatter radiation while retaining high contrast and sharpness. It improves patient comfort, simplifies positioning, and allows for as much as 50% lower dose compared to grid exams.



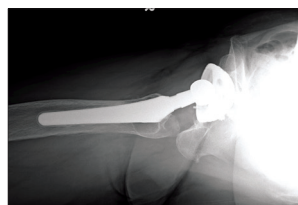
You can choose the optimum grid ratio for your examination needs.

It does not guarantee an equivalent effect to the actual grid.



#### Dynamic Visualization II

Advanced processing adjusts density and contrast display based on anatomic structure, hardware, and body thickness throughout the entire exposure field.



Conventional processing



Dynamic Visualization II

## FDR ES Specifications

| Model Name<br>Common Name                           | FDR ES G35<br>FDR ES 14G                                                                                                                                                                                                                                                                                         | FDR ES C35<br>FDR ES 14C | FDR ES G43<br>FDR ES 17G          | FDR ES C43<br>FDR ES 17C | FDR ES C24<br>FDR ES 24C       |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------------|
| Scintillator                                        | GOS<br>(Gadolinium<br>Oxysulfide)                                                                                                                                                                                                                                                                                | CsI<br>(Cesium Iodide)   | GOS<br>(Gadolinium<br>Oxysulfide) | CsI<br>(Cesium Iodide)   | CsI<br>(Cesium Iodide)         |
| Physical Specifications                             |                                                                                                                                                                                                                                                                                                                  |                          |                                   |                          |                                |
| External Dimensions                                 | 18"x15"x0.6"                                                                                                                                                                                                                                                                                                     |                          | 18"x18"x0.6"                      |                          | 13"x10.5"x0.6"                 |
| Weight (with battery)                               | 6.4 lbs.                                                                                                                                                                                                                                                                                                         |                          | 8. lbs.                           |                          | 3.5 lbs.                       |
| Load Resistance                                     | 264 lbs. point load, 600 lbs. distributed (protective cover required for standing exams)                                                                                                                                                                                                                         |                          |                                   |                          |                                |
| Water Resistance                                    | IPX3                                                                                                                                                                                                                                                                                                             |                          |                                   |                          |                                |
| Image Acquisition                                   |                                                                                                                                                                                                                                                                                                                  |                          |                                   |                          |                                |
| Exposure Size<br><br>Inches<br>Pixels               | 16.8"x13.8"<br>2,836x2,336                                                                                                                                                                                                                                                                                       |                          | 16.7"x16.8"<br>2,836x2,832        |                          | 11.3"x9.1"<br>1,536x1,920      |
| Preview / Cycle                                     | 2 sec. / 7.5 sec.                                                                                                                                                                                                                                                                                                |                          | 2 sec. / 9 sec.                   |                          | 2 sec. / 7.5 sec.              |
| Max. Exposure Time                                  | 10 seconds                                                                                                                                                                                                                                                                                                       |                          |                                   |                          |                                |
| Bit Depth, Pixel Pitch                              | 16 bit, 150µm                                                                                                                                                                                                                                                                                                    |                          |                                   |                          |                                |
| Grid Frequencies                                    | 40 lines/cm recommended; 40-44 lines/cm, 80 or more lines/cm useable<br>Virtual Grid™ (option) simulates scatter clean-up for images acquired without a grid                                                                                                                                                     |                          |                                   |                          |                                |
| Connectivity                                        |                                                                                                                                                                                                                                                                                                                  |                          |                                   |                          |                                |
| Detector to<br>FDX Console                          | Tethered or Wireless<br>IEEE 802.11n in 2.4 & 5 GHz bands.<br>Wireless in-room 33' (approx.) range, closed loop, image data only (no patient info).<br>WPA2-PSK encryption with AES & MAC (unique IP) protocols secure connection, confirmation & completion of data, handshake pairing to registered FPDs only. |                          |                                   |                          |                                |
| FDX Console to Network                              | LAN wired Ethernet: 10/100/100 Base-T, DHCP or Static                                                                                                                                                                                                                                                            |                          |                                   |                          |                                |
| Battery (Lithium ION , user-swappable)              |                                                                                                                                                                                                                                                                                                                  |                          |                                   |                          |                                |
| Performance (approx.)<br>Smart Switch<br>Sleep Mode | 1 hour, 50 minutes<br>7.5 hours                                                                                                                                                                                                                                                                                  |                          |                                   |                          | 3 hours, 30 minutes<br>8 hours |
| Charge Time (approx.)<br>Quick Charge (approx.)     | Battery Charger: 3 hours / Power Box SE Cable: 4.5 hours / MP SE Cable: 4 hours<br>After low battery alarm: 3 min. charge allows up to 30 images (battery charger or power supply)                                                                                                                               |                          |                                   |                          |                                |
| Environment and Power                               |                                                                                                                                                                                                                                                                                                                  |                          |                                   |                          |                                |
| Temp., Humidity,<br>Atmospheric Pressure            | Operating: 59-86°F, 15-80%RH (non-condensing), 700-1,060 hpa<br>Non-Operating: 41-95°F, 10-80%RH (nc), 700-1,060 hpa<br>Storage (packed): 14-122°F, 10-90%RH (nc), 700-1,060 hpa                                                                                                                                 |                          |                                   |                          |                                |
| Power Conditions                                    | Single phase 50/60Hz Std 110VAC<br>Power Box/MP Box: 100-240VAC (+/-10%), 200VA or less,<br>FDX Console: 115/230VAC (auto), 460VA or less<br>Battery Charger: 100-240VAC (+/-10%), 100VA or less                                                                                                                 |                          |                                   |                          |                                |
| Heat Output                                         | Detector: 316KJ/h                                                                                                                                                                                                                                                                                                |                          |                                   |                          |                                |
| Power Consumption                                   | FDX Console: 110W (operating), 90W (standby)<br>MP Box and 2 Detectors: 88W<br>Power Box and 1 Detector: 22W<br>Battery Charger: 50W (operating), 5W (standby)                                                                                                                                                   |                          |                                   |                          |                                |