



## FDR D-EVO™ G35

### *The Easy Transition to DR Evolved*

#### **Application**

Fujifilm's FDR D-EVO™ provides a simple and cost effective upgrade path for your existing x-ray room systems to the speed, image quality and workflow benefits of DR (digital radiography) with no major retrofit modifications required. This digital x-ray system features a 14x17" flat panel detector (FPD) for general radiography imaging. Its light weight and standard 14x17" size design makes it a perfect fit to existing analog rooms or CR (computed radiography) bucky trays and holders. Its portability for tabletop and other traditional uses makes it a great addition to existing DR (digital radiography) rooms as well.

FDR D-EVO™ offers outstanding image quality for all types of general radiographic examinations such as chest, abdomen and extremity exams. Its light weight, thin design simplifies positioning for technologists and adds comfort for the patient. The detector's unique electronics design provides significant gains in dose efficiency and exceptional image quality for every exposure.

#### **Features**

##### **Technology**

FDR D-EVO™ introduces Fujifilm's new patented Irradiation Side Sampling (ISS) technology. This unique image receptor circuitry captures x-rays on the incident/patient side of the detector, which is in contrast to traditional designs that capture below/behind the scintillator layer. Capturing x-ray photons closer to the surface of the detector where signals are strongest and sharpest enables stronger and sharper images with improved MTF (modulation transfer function) image density separation accuracy, significantly higher sharpness and DQE (detective quantum efficiency) dose efficiency. This design achieves significant dose efficiency improvements over CR and comparable DR detectors.

##### **Weight & Size**

FDR D-EVO™ is currently the lightest and thinnest FPD available in a 14x17" size. Weighing only 6.15lbs., it's comparable to what technologists are used to with traditional x-ray cassettes. Its external dimensions measure 18x15x0.55" precisely mimicking the size of

standard cassettes for easy fit and positioning. The detector's outer design also features shock absorbing corners and recessed fingertip grip areas to help ensure a secure grip when positioning.

##### **Reliability & Flexibility**

FDR D-EVO™ features a detachable cord which makes positioning easier for the technologist while ensuring reliable, stable connectivity with the fast image transfer every time. Images display in just five (5) seconds and cycle is only nine (9) seconds, ideal for busy environments where immediate image availability and fast throughput are critical.

The added convenience of its detachable cord allows use of the same FPD between the table, upright and free work. A separate connection point can be located at both the upright and table to allow plug-in at either location on demand. Interchanging between the upright and table allows even more flexibility and simplified workflow.

# FUJIFILM MEDICAL SYSTEMS

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For even faster workflow, the preference is to utilize two (2) detectors in one suite. This allows the technologist to leave one FDR D-EVO™ inside the upright and the other in the table. The detector in the table can easily be taken out of the Bucky tray for free detector uses such as for extremities and AP Chest exams or for patients in wheelchairs or stretchers.

## **FDX Console Workstation**

The FDX Console, (include standard) performs patient ID, worklist updates, immediate image preview, processing, QA and image transmission. The FDX Console simplifies image quality with automated and advanced image processing functions. Includes Fuji's auto trimming for off center positioned exams with FDR D-EVO. This feature automatically detects the exposed region and its size relative to the detector size and sends a true sized image optimized for full display on PACS.

*Additional specifications available separately*

## **Configurations**

### **Standard Retrofit**

The FDR D-EVO™ Standard retrofit configuration includes one or two portable detectors, an FDX Console, a control box and a power supply. The system operates on 110VAC and standard 100/1000 Base-T Ethernet network connections are required for the control unit

and the FDX Console. Synchronization of the detector activation requires a simple connection to the exposure circuitry of the existing x-ray generator system.

## **Fujifilm Integrated Room**

FDR D-EVO™ Suites are available as integrated x-ray room packages. Turn-key Suites include one or two FDR D-EVO™ detectors with high quality front end x-ray systems and robust upright and table devices. *Additional specifications available separately*

## **Standard System Components Basic System Configuration**

One or two detectors can be connected to a single power supply. Up to five (5) detectors can be registered to one system to allow interchange of detectors from other rooms/systems.

## **D-EVO™ FPD**

Model G35: standard, 14 x 17" size corded, GOS (G<sub>2</sub>d<sub>2</sub>OS) scintillator

## **Image Reading Specifications:**

Standard mode 150μ, 16 bits/pixel

<u>Image Size</u>	<u>Pixel Matrix</u>
17 x 14"	2,880 x 2,304
14 x 17"	2,304 x 2,880

## **Exposure Times:**

Minimum 500ms, Maximum 3,800ms (3.8 seconds) easily accommodates breathing techniques and larger patients.

**Image Display Time:** 5 seconds

**Cycle Time:** ~9 seconds 14x17" for front chest or front cervical ~20 seconds 14x17" for upright abdomen

## **Power Supply Unit**

The power supply unit uses a standard RS232C cable (16 ft. standard length) to reach the control unit and a 15mm diameter, 25 ft (15m) cable to the generator.

## **Control Unit**

The control unit is a desktop computer (CPU only) with a Linux OS and 2MB memory.

## **Options**

### **Grids**

Snap-on grids are available in standard ratios and focal distances.

## **Weight bearing holder**

Holder snaps on to increase the weight capacity to 550 lbs. (Detector alone accommodates up to 275 lbs. distributed weight or 88 lbs. on a single point)

## **QC Phantom**

Fujifilm's 1-Shot Phantom and 1-Shot Phantom Plus are compatible with this system.

**Magnetic clamp**

A cord holder attaches to any preferred metallic location to hold the connection cable for convenient reach.

**Remote Maintenance**

Maintenance and reports with statuses optionally available.

**Power Consumption****FPD & Power Supply**

Operating: 80W (1A)

Standby: 60W (0.42A)

Applying current: 15W

Standard 3 prong AC outlet,

AC100V-AC240V +/- 10%, single phase 50/60Hz, 100VA or less

**Control Unit**

Operating: 110W (2.55A)

Standby: 90W (1.27A)

Standard 3-prong AC outlet,

AC115V-AC230

(automatic switching)

**FDX Console****Technologist Workstation**

*Specifications available separately*

**Safety and Electrical****Certifications**

UL 60601-1, ED1:2010,CSAC22.2

No.601.1:1990, IEC60601-1

through-7,21CFR PART 1020.30,

.31 & .40, IEC 60950, [US]

UL60950, [EU] EN60950, CEM:

[US] FCC Part 15 class B, [EU]

EN55022 or CISPR22 class B and

others

**Environmental Conditions****Operating**

Temperature: 59-86°F (15°-30°C)

Humidity: 15-80% RH

(non-condensing) Atmospheric

pressure: 700hPa-1,060hPa

**Non-operating**

Temperature: 41°-95°F (5°-35°C)

Humidity: 10-80% RH

(non-condensing)

Atmospheric pressure:

700hPa-1,060hPa

**Control Unit**

Heat Output (max): 135 BTU/Hr

or lower Noise (max): 5.0 db

**FPD & Power Supply**

Heat Output (max):135 BTU/Hr or

lower Noise(max):3.8db

**System Calibration**

Daily: automated, upon start up

Automated calibration does not

interfere with technologist work-

flow. Interruption of calibration is

possible for immediate exposures.

Full Extended System Calibration:

periodic maintenance every 6

months.

**Dimensions****Flat Panel Detector**

18x15x0.55 inches external,

6.15 lbs. (45.9x38.3x15cm, 2.8kg),

Exposure size 13.6x17"

(34.5x43.2cm)

**Power Supply Unit**

4.7x13.7x13.7 inches, 17.2lbs.

(120x350x350mm, 7.8kg)

**Control Cabinet**

4.5x14x15.7 inches, 18.3lbs.

(114x353x399mm, 8.3kg)

**Warranty**

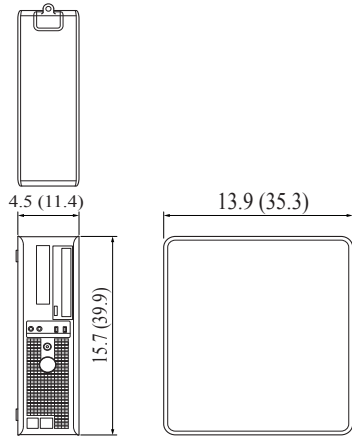
1 Year Full System Warranty with

the exception of damage due to

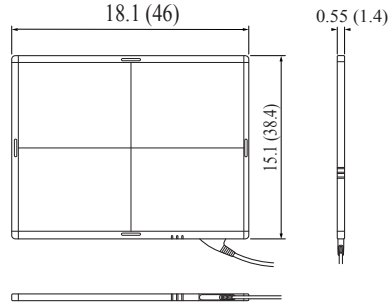
missuse, dropping or impact.

# Fujifilm FDR D-EVO™

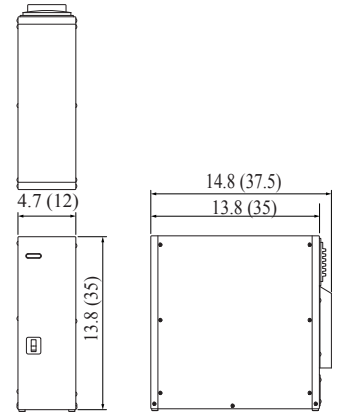
## Dimensions Inch (cm)



Power Supply

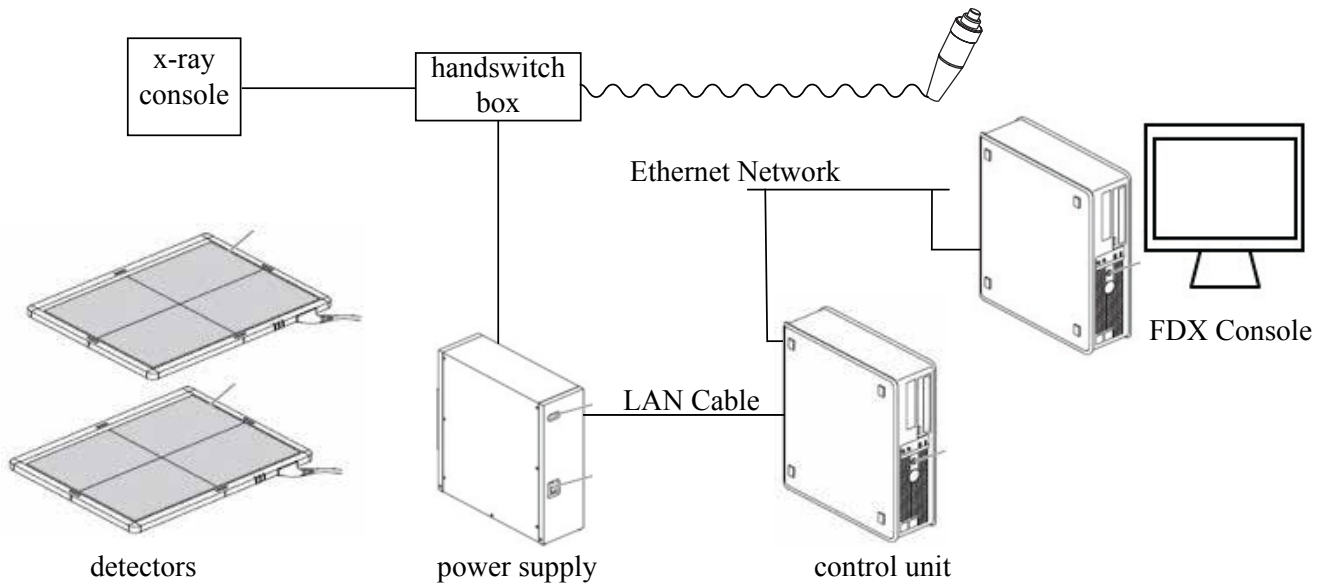


Flat Panel Detector



Control Cabinet

## Connectivity Diagram



\*\*Specifications subject to change without notice

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**FUJIFILM**

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