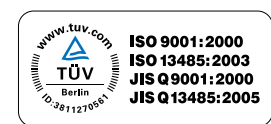




# Mobile X-Ray System MobileDaRt Evolution



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※Before operating this system, you should first thoroughly review the Instruction Manual.

**SHIMADZU**  
SHIMADZU CORPORATION. International Marketing Division  
3. Kanda-Nishikicho 1-chome, Chiyoda-ku, Tokyo 101-8448, Japan  
Phone: 81(3)3219-5641 Fax: 81(3)3219-5710  
URL <http://www.shimadzu.com>

# Advanced Digital Mobile System That Performs Effectively in Emergencies

Mobile X-Ray System

## MobileDaRt Evolution

**Extreme situations, during emergencies, operations and in sudden disasters, demand that X-ray radiography be performed quickly under difficult conditions. Now, a digital mobile X-ray system offering superior responsiveness and mobility is here, providing medical facilities with a valuable ally in these critical moments.**

In medical facilities requiring quick action, this digital mobile X-ray system allows verification of images just 3 seconds after they are obtained, eliminating the need to replace cassettes and read CR barcodes. Output of up to 32 kW provides rapid radiography that ensures blur-free images, even with children and patients that are difficult to keep still.

MobileDaRt Evolution provides excellent operability, allowing users to move the system freely for easy positioning in confined locations. This reliable, state-of-the-art system lends powerful support to medical facilities faced with numerous restrictions and a high proportion of urgent cases.

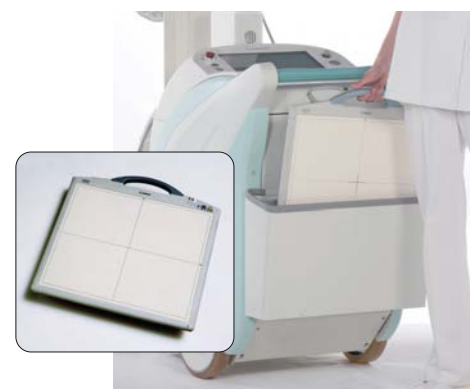
### Superior Performance Supports Stress-Free Mobile Examinations

Image verification 3 seconds  
after exposure ensures a smooth workflow

High power minimizes effect by patient motion

User friendly design ensures quick positioning  
and smooth responsive mobility

Provides new concept



## FPD-Equipped Mobile System Performs Well in Critical Situations

### Verify image just 3 seconds after exposure



Easy-to-Carry FPD (Flat Panel Detector)  
with Large Field of View

**Field of view** 35 cm×43 cm (14"×17")

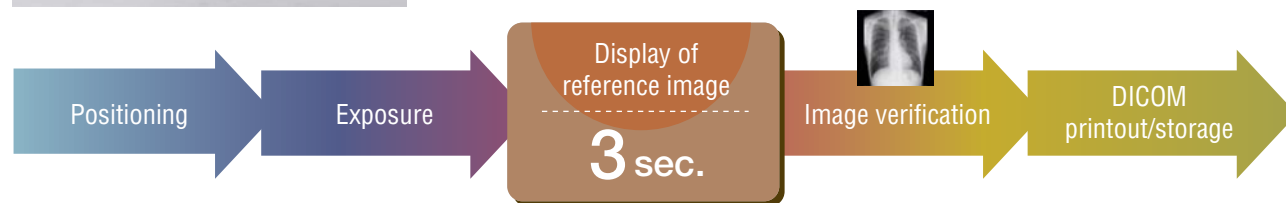
**Thickness** 23 mm (0.9")

**Weight** 4.8 kg (11lbs)



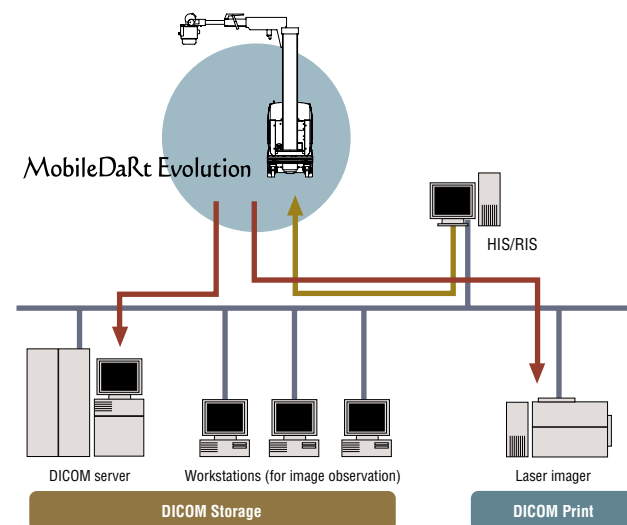
Main unit touch-panel also allows adjustment of image quality.

Displays images in just 3 seconds. Especially useful in emergency rooms where it allows information needed for the next procedure to be obtained quickly, substantially reducing overall time. No need to replace or read CR and similar types of cassettes, allowing examination of a large number of patients in a relatively short time.



### Easy output of DICOM data to network

Standard MobileDaRt Evolution features include support of DICOM print and storage. Output data in DICOM format to a laser printer, image server, or viewer using the provided LAN connection. Optional wireless network connection is available that provides even greater freedom for communication to RIS or PACS while moving the unit.



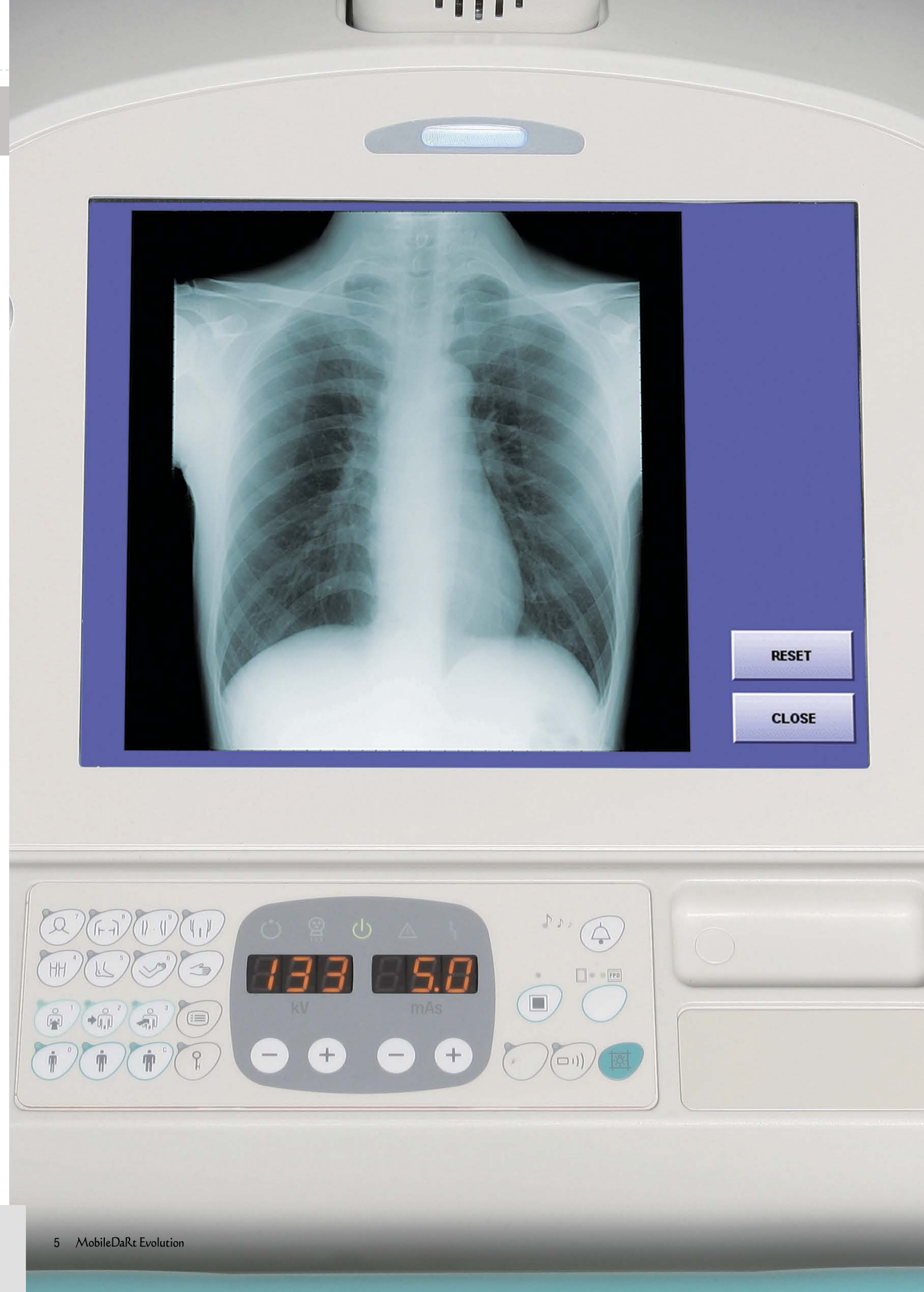
### Large main unit storage of up to 3,500 images ensures peace of mind

**Safety function**

When performing repeated radiography, a large capacity storage system provides peace of mind. Store up to 3,500 images in the main unit and easily refer to previous images, allowing quick comparisons between preoperative and postoperative states. No longer are technologists limited to 10 or 15 CR cassettes when doing their morning rounds.

### No inconvenient cassette replacement or CR reading

Eliminating the need to replace or read CR and similar types of cassettes means no more inconvenience to patients. And without the need to read CR or similar types of barcodes, a large number of patients can be examined in a relatively short time.



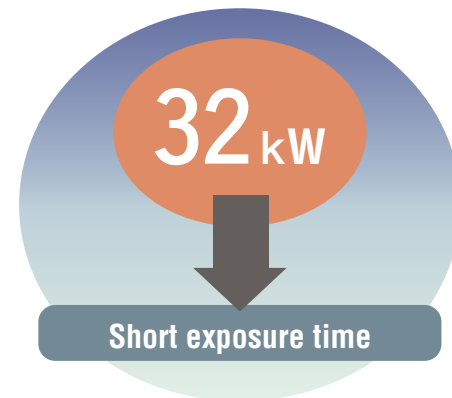
## High Image Quality Even with Children and Emergency Cases Where Fixed Positions Are Difficult to Maintain

### Blurring suppressed by short exposure time

Perform radiography quickly, thanks to a maximum output capacity of 32 kW. This ensures sharp images with minimal blurring, even if the patient moves.



With radiography of children and emergency cases where it is difficult to maintain a stable posture, there is a tendency for images to be blurred due to patient movement. With MobileDaRt Evolution, a maximum output of 32 kW allows for shorter exposure times, eliminating blurring issues.



- Inverter frequency **60 kHz**
- Maximum tube voltage **133 kV**
- Tube current-time product **320 mAs** max.



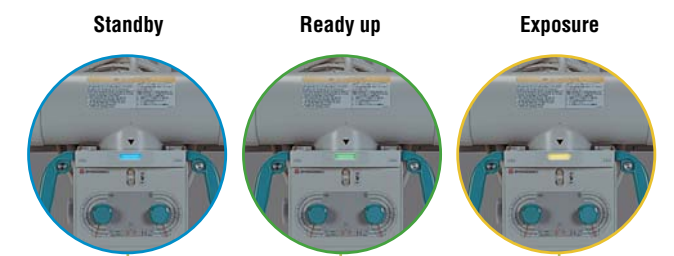
### Perform radiography even with a low battery Safety function

This system is equipped with a function that allows radiography in an emergency, even if the battery runs low. This feature can also be used if waiting for the battery to recharge is not convenient.

## Features to Ensure Optimal Exposure Timing

### Exposure status indicated by illumination

The MobileDaRt Evolution clearly displays essential X-ray process information such as "Standby" and "Exposure" status using a bright, easy-to-read display. Monitoring exposure timing has never been easier or more accurate.



### Extra hand switches can be installed on the front panel Option

To enhance the technologist's ability to take care of the patient while performing radiography, an extra hand switch (option) can be installed on the front panel of the main unit (column side). This extra hand switch is also illuminated.



### Illuminating hand switches Option

To make exposure timing even easier to follow, an optional illuminating hand switch can also be used to give color-coded indications that the system is ready or is performing X-ray radiography.



# Superb, Highly Acclaimed Mobile with Smooth Operability, Responsiveness and Mobility



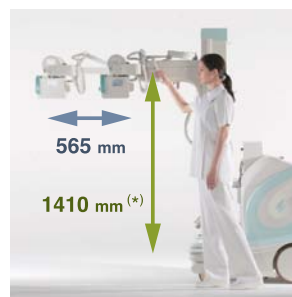
## Outstanding operability

### Light-touch, natural maneuvering

A light pressure applied to the drive handle moves the mobile system in a natural manner as if it were an extension of one's hand, allowing the MobileDaRt Evolution to be controlled easily and effortlessly.

### Counterbalance system

Accurate and smooth positioning is available through a counterbalance system, allowing for easy positioning and exposing.



(\* In case of short column type, 1260mm.

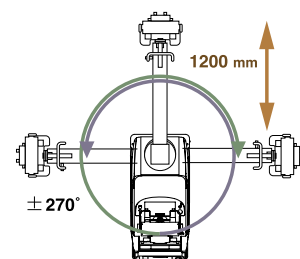
### "Inch-mover" buttons

The MobileDaRt Evolution can be moved forward or backward by using the bedside drive controls located on the front of the collimator. Safety is a major consideration and any sudden force applied to the handle during "Inch-mover" operation stops the MobileDaRt Evolution automatically. In addition, X-ray irradiation is also automatically disabled during any movement of the MobileDaRt Evolution.



### Wide imaging range

The MobileDaRt Evolution has a long stroke on its ultra long arm (up to 1200 mm), making even the most difficult imaging situations accessible.



### "All Free" buttons

Pressing any of the "All Free" buttons releases the electromagnetic locks for arm rotation, arm extension, and vertical movement of the X-ray tube, thus allowing positioning to be done in one simple step. The counterbalance system enables accurate positioning with smooth operation.



## Low level of movement noise is ideal for quiet environments

Incorporates a silent motor that significantly reduces driving noise.

## Optimum working height for operator comfort

Drive handle height can be optimized depending on the height of the operator.\*

(\* The handle height can be set at the time of installation by service personnel.



## For safety in a crowded facility

Safety function

To avoid accidents when moving the MobileDaRt Evolution through a crowded medical facility, an alarm can be used while driving to alert others to the presence of the unit.

## Shock-resistant main unit cover

A reinforced main cover reduces the possibility of damage from collisions with objects during movement.

## Keyless password entry allows operation without a key switch

Option

Setting a password for each user enables keyless use of the system.



# New Exposure Reduction Concept

## Supports display of X-ray exposure dose

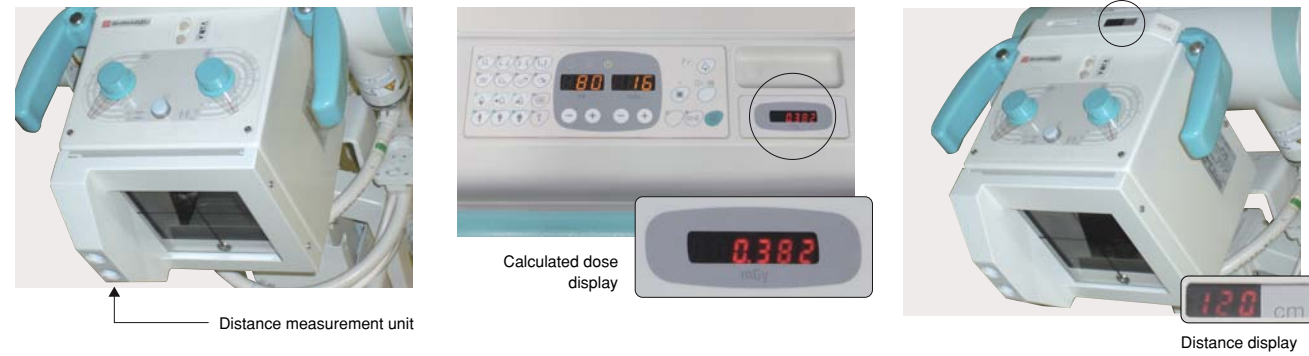
Option Safety function

Attaching a dose area product meter to the front of the collimator or incorporating a dose calculation function in the system allows dose measurement or calculation, as well as display of it on the main unit display panel. Dose data measured with a dose area product meter can also be output in DICOM format.

## Displays distance from X-ray tube focal point to patient

Option

If dose calculation function is incorporated in the system, the distance from the X-ray tube focal point to the patient can be displayed near the collimator with distance display option, making it easier to maintain an appropriate exposure distance without using a tape measure. (Distance display requires the dose calculation option.)



# External Dimensions



FPD	CXDI-50G or CXDI-50C (selectable)
Custom specification	High focal point ( Short column type ) Focal point is lifted up by 150mm. Note: Custom specification cannot be changed after delivery.
Power for charging	Single-phase AC : 50/60 Hz, 1 kVA Voltage : 100, 110, 120, 200, 220, 230, 240 V Power plug : 3-pin plug (2-prong ground)

### Options

#### Radiation Shield (folding type)



#### Infrared Remote Controller



With the infrared remote controller, X-ray irradiation can be executed remotely to minimize the operator's radiation.

### Related Items

#### Grid Unit



4 types of grid units which snap onto the front of the FPD are selectable.  
 · 40 Lines/cm, 10:1, 180 cm · 40 Lines/cm, 8:1, 110 cm  
 · 40 Lines/cm, 6:1, 150 cm · 40 Lines/cm, 4:1, 110 cm

#### Dose Area Product Meter



Unit : mm

