

Mobile X-ray System

# MobileDaRt Evolution

MX9 Premium Version 





# Vision on the move

Embracing the challenge, Moving into new possibilities

## MobileDaRt Evolution™

MX9 Premium Version V

Discover new possibilities in healthcare.  
With precision and compassion, our innovative solution  
offers a new approach to everyday patient care.

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# Empowering Your Vision

## Leveraging Productivity with Camera Applications OPTION



### The Vision reflects New Possibilities

## VISION SUPPORT

Displays the live view captured by the 3D camera on a second monitor along with SID and X-ray tube angles, supporting precise positioning.



### Preparation for Radiography Secondary Workspace

- Edit Exposure Condition
- Entrance Dose Measurement<sup>\*)</sup>

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<sup>\*)</sup> 3D Camera option is required



Second Monitor can serve as a secondary workspace to enhance workflow efficiency and provide essential information for dose management.



### Positioning Camera Applications OPTION

- SID Measurement
- Live View Display
- X-Ray Tube Alignment Support
- Laser Navigation<sup>\*)</sup>

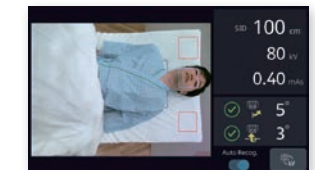
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<sup>\*)</sup> Cross Laser Marker option is required



The live view obtained by the Live View camera, along with SID and X-ray tube angles, can be displayed on a second monitor.



Supports precise positioning and contributes to reducing the frequency of retakes.

### After Exposure X-ray images display



Prompt image confirmation is possible on the large monitor of the main unit, allowing for swift decisions on whether to retake the image.





# New Clinical Value

## Enhancing Clinical Value with the Latest DR System



### Improves Workflow with a Second Monitor

Allows adjustment of exposure parameters and check of patient information.



### Easy-to-use Large Touch Monitor

Equipped with a 19-inch touch panel monitor. Compared to standard laptop monitors, images are easier to view and touch operation is smoother.

### Scatter Correction enables Gridless Radiography OPTION

The system can be equipped with a function to remove scatter noise and improve image contrast, making it possible to perform exposures without the use of a grid therefore making it easier to handle FPDs.

### Smart Noise Reduction OPTION

Smart Noise Reduction helps to reduce radiation dose while maintaining image quality. This software provides versatility for various examinations and user-friendly operation.



Conventional Noise Reduction



Smart Noise Reduction

**Left :** Conventional Noise Reduction w/ standard dose(100%) 75kVp, 20mAs

**Right :** Smart Noise Reduction w/ reduced dose(50%) 75kVp, 10mAs

## GLIDE VIEW function

### Intuitive Maneuverability, 360° Agility

Optimized power assist system delivers natural light touch driving whether moving forward, stopping quickly or changing directions. It's also possible to turn on the spot. The system maneuvers easily and naturally to support comfortable operation.

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### Configure Settings Easily Even in Tight Spaces

The compact body is only 56cm wide, making it easier to maneuver even with limited space. With the collapsible column, collision with tall medical accessories such as IV poles and other devices can be prevented.

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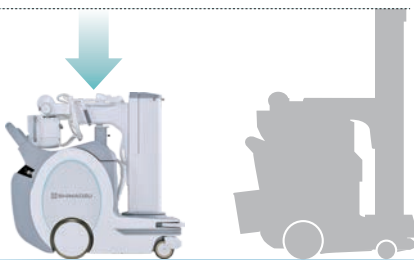
# Glide with Clarity

## Excellent Visibility and Effortless Mobility Generate Smiles



### Great forward Visibility offering Peace of mind

The collapsible column has been developed to enhance forward visibility during travel, making it ideal for daily hospital rounds.



SHIMADZU's former Mobile X-ray system



Operator-Friendly Design  
ROUNDS



Enhancing Your Workflow

Adjustable handle height OPTION

The handle height can be adjusted anytime based on the operator's comfort level and preference.



Wireless Solution for Exposure Switch<sup>\*)</sup> OPTION

A wireless hand switch or IR remote controller allows you to perform exposures remotely for even more ease-of-use.



Wireless hand switch



IR remote controller

Heightened Security

Keyless Entry OPTION

Instead of a key, each user can have their own password enabling accessibility to preferences and preset X-ray parameters. This further enhances security and workflow.



Anti-theft FPD lock function

FPD storage bin is equipped with a detector lock function that can heighten the security level against FPD theft.



\*) Availability of the option depends on the regional radio wave regulation. Please contact your sales representative regarding the availability.

VISION SUPPORT

Laser Navigation OPTION

Equipped with a cross laser marker on the collimator. When the X-ray tube reaches the proper angle range, the corresponding laser marker lights up, supporting appropriate tube angle during positioning.



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Convenient Battery Charging Process

The conveniently accessible power plug is located just under the handle bar on the back side of unit. The FPD can be charged in the main unit via a connector in the FPD bin. (option)



Entrance Surface Dose Display<sup>\*)</sup> OPTION

Calculates and displays the estimated entrance surface dose based on the set exposure parameters and the distance to the patient, before and after exposure.

\*) 3D camera option is required

Operate From Any Position

Easy Positioning from anywhere

Pressing the "All-Free" button releases the electromagnetic locks for the telescopic arm and column at the same time, thus enabling simple one-step positioning. Multiple "All-Free" buttons are located around the system, so the technologist can access the system from any direction.

Inch-Mover for Bedside Positioning

The main unit can be moved forward or backward with switches conveniently located on the collimator. The technologist can adjust positioning more precisely without moving around the patient bed.

Field of view Collimation by dual side controls

The collimator knobs and lamp button are located on both the front and the back side, allowing the technologist to easily confirm and change the irradiation field.

Shock-resistant body design

The body cover has been strengthened to prevent damage should the unit hit an object when moving around the wards. The unique soft-touch bumper automatically stops the unit when even the slightest pressure is detected.



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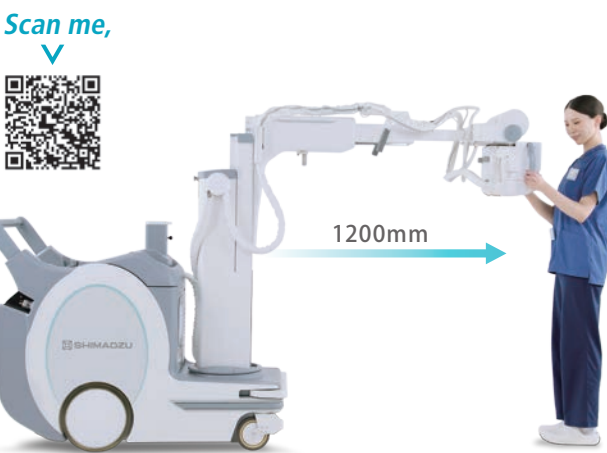
# Intensive Care Units

Flexible Operability in Confined Spaces  
ICU



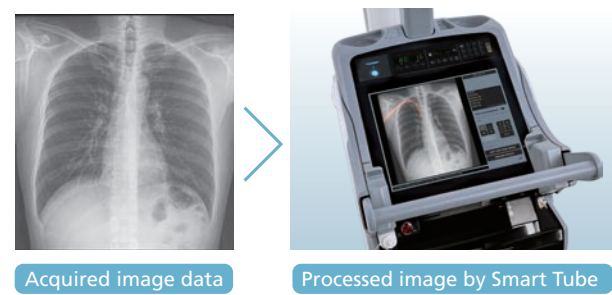
## Wide Exposure Range

The system is especially useful for imaging in ICUs, where there are numerous devices around the patient. With the low profile X-ray tube and the 1200 mm extension telescopic arm, the MX9 easily positions for patient imaging.



## Smart Tube : Tube and Catheter Verification Support Software OPTION

Display images processed by Smart Tube on the main monitor.<sup>\*1)</sup>



### Smart Tube Tube and Catheter Verification Support Software<sup>\*2)</sup>

Developed with AI technology, Smart Tube enhances potential areas of tubes and catheters from images, supporting position verification.

<sup>\*1)</sup> Do not rely solely on the imaging processing capabilities of Smart Tube when verifying tubes or catheters. Use visual confirmation of images and other methods in reaching a final judgement.

<sup>\*2)</sup> The AI (artificial intelligence) technology used in Smart Tube is not a self-guided interactive learning-type AI.

# Neonatal Intensive Care Units

## Compact FPD for Pediatric Care

The compact FPD fits inside the cassette tray of an incubator.



## Designed to Minimize Radiation Exposure

The estimated Dose Area Product (DAP) is displayed prior to exposure, and the calculated DAP value is stored for post-exposure management. (measured DAP instrument is optional.)



Comfortable Examinations for Patients  
NICU

## Pediatric Filter<sup>\*)</sup> Supported

In order to cut soft X-rays that do not contribute to image acquisition, the pediatric filter can be installed in the collimator. Using a filter reduces radiation exposure efficiently while image quality is maintained.



<sup>\*)</sup> The pediatric filter itself is not an optional item. Please use one belonging to your facility.



# Emergency Room



Designed for Quick Action  
ER

## Designed for Sterile Equipment Covers

For daily use, extra storage spaces are provided to store wipes, pens, markers, etc. Grooves have been added for holding the FPD vertically while putting a sterile cover on the unit.



## IP67 Dust and Water Resistance

The FPDs conform to the IP67 dust and water proof standard to prevent ingress of dust and liquids.

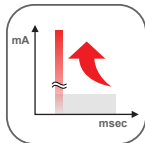
## Minimal Startup Time for Emergency Needs

System startup takes only one minute and is immediately ready for use in emergency conditions.



## High power 32 kW output

The 32 kW maximum power output delivers excellent image quality and short exposure times. This ensures sharp images with minimal blurring, even if the patient moves.



# Operation Room



Meeting the Needs for Surgical Environments  
OR

## Integrated Design for Easy Clean-up

The flat screen design makes it easy to clean and maintain hygiene.



## Smart DSI : Retained Object Confirmation Support Software OPTION

Display images processed by Smart DSI (Detection Support with Image processing) on the main monitor.\*1)



Acquired image data



Processed image by Smart DSI



## Smart DSI Retained Object Confirmation Support Image Processing\*2)

Developed with AI technology, Smart DSI aids the detection of objects retained in the body by enhancing regions of the image that potentially show surgical needles, gauze with radiopaque threads, and other foreign objects.

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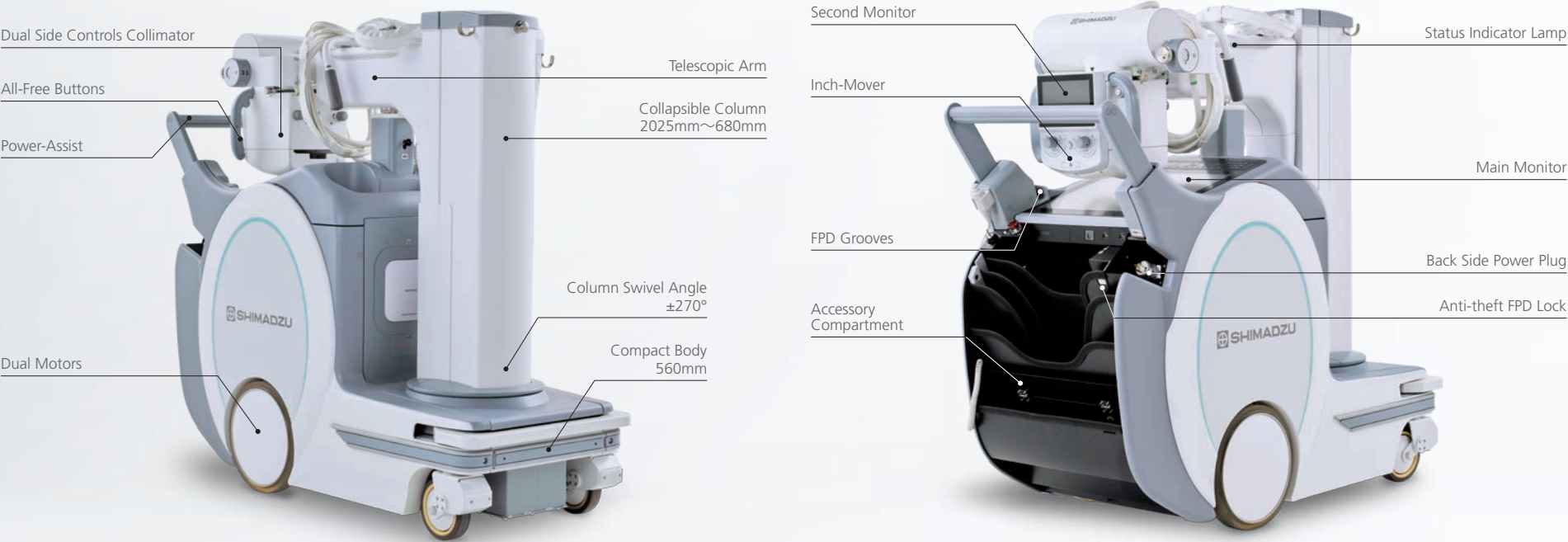


\*1) Do not rely solely on the imaging processing capabilities of Smart DSI when determining if foreign objects are retained in the patient. Use visual confirmation of images, gauze counts, and other methods in reaching a final judgement.

\*2) The AI (artificial intelligence) technology used in Smart DSI is not a self-guided interactive learning-type AI.



# System



## Optional features

\*) The options listed are not comprehensive.

- Keyless entry
- Wireless LAN
- Adjustable handle kit
- 3D Camera
- Cross Laser Marker
- FPD wired connection kit
- Smart Tube (Tube Catheter Verification Support Software)
- Smart DSI (Retained Object Confirmation Support Software)
- DAP meter mount kit \*1)
- Protective screen (folding) \*2)
- Additional hand switch

- Wireless hand switch
- IR Remote Controller \*2)
- Luminous hand switch



Decoration Label : Sweet Animals



The photo is an example of the sticker application.

- \*1) Physical DAP meter can substitute calculated dose function, when needed.
- \*2) Those options cannot be combined at the same time.

# Product lineup

Two versions are available for selection depending on needs and purposes.

## Premium Version

- Second Monitor Integrated
- 3D Camera (option)



## Standard Version



# DR System



99 µm Glass-Free model



Versatile model

\*) The available FPDs vary depending on the country. For more details, please contact your sales representative.



Label Description: Mobile X-ray System MobileDaRt Evolution

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