

Optional Items

Protection Partition



Dose Area Product Meter



Infrared Remote Controller

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

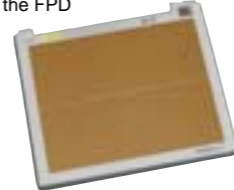


Related Items

Grid Unit

4 types of grid units can be selected. They are located at the front of the FPD

- 40Lines/cm, 10:1, 180cm
- 40Lines/cm, 8:1, 110cm
- 40Lines/cm, 6:1, 150cm
- 40Lines/cm, 4:1, 110cm



Specifications

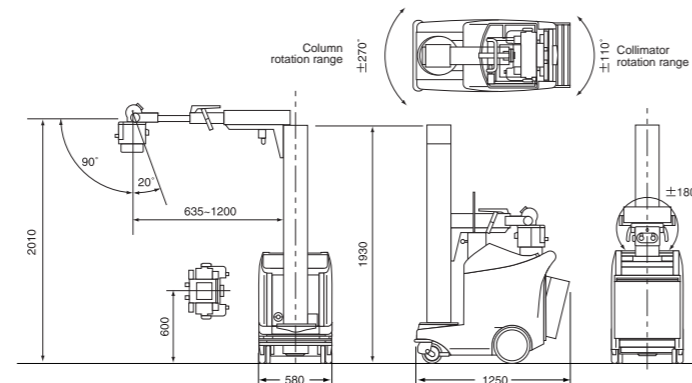
X-ray generator	
Control method	Inverter method, max. frequency 60kHz
Rating	12.5kW
Tube voltage range	40-125kV (1kV steps)
mAs range	0.32-320mAs (12.5% steps)
Max. current	160mA
Anatomical program	72 items
X-ray tube device	
Max. anode heat capacity	300kHU
X-ray tube focal spot size	0.7mm
Target angle	16°

Power for charging	Single-phase AC: 50/60Hz, 1kVA Voltage: 100, 110, 120, 200, 220, 230, 240V Power plug: 3-pin plug (grounding type 2-prong)
--------------------	--

DR unit	
Effective field of view	35×43cm
Effective number of pixels	2,208×2,688
Pixel pitch	160μm
Resolution	3.1 lp/mm
Output gradation	12 bits
Size of imaging unit	491 (W)×477 (H)×23 (D) mm
Weight	4.8 kg

X-ray tube support structure and trolley	
Transfer method	Electric operation
X-ray tube support method	Telescopic arm
Focus height	600-2010mm
Arm length	635-1200mm
C-arm rotation range	± 270° (exciting open type electromagnetic lock)
Tube rotation around tube support axis	± 180° (friction lock)
Tube rotation around tube axis	Forward min. 90° back min. 20° (friction lock)
Travel speed (km/h)	5 ± 0.5 (values may vary with floor condition)
Column height	1930mm
Total width	580mm
Total length	1250mm
Total weight	394kg (except FPD)

Dimensions unit : mm



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

SHIMADZU MEDICAL SYSTEMS

20101 South Vermont Ave., Torrance, California 90502, U.S.A.

Phone: 1(310)217-8855 Fax: 1(310)217-0661

SHIMADZU DEUTSCHLAND GmbH

Albert-Hahn-Strasse 6-10, D-47269 Duisburg, F.R. Germany Phone: 49(203)7687-0 Fax: 49(203)766625

SHIMADZU (ASIA PACIFIC) PTE LTD.

16 Science Park Drive #01-01 Singapore Science Park, Singapore 118227, Republic of Singapore

Phone: 65-6778 6280 Fax: 65-6779 2935

SHIMADZU (HONG KONG) LTD.

Suite 1028 Ocean Center, Harbour City, Tsim Sha Tsui, Kowloon, Hong Kong

Phone: 852-2375-4979 Fax: 852-2199-7438

SHIMADZU MEDICAL SYSTEMS (OCEANIA) PTY. LTD.

Units E, 10-16 South Street, Rydalmere N.S.W. 2116, Australia

Phone: 61(2)9898-2444 Fax: 61(2)9684-4055

SHIMADZU DO BRASIL COMÉRCIO LTDA.

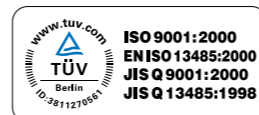
Avenida Marquês de São Vicente, 1771. Barra Funda CEP: 01139-003-São Paulo-SP, Brasil

Phone: (55)11-3611-1688 Fax: (55)11-3611-2209

Overseas Offices

Istanbul, Moscow

URL <http://www.shimadzu.com>



Shimadzu Corporation Medical Systems Group has been certified by TÜV Rheinland as a manufacturer of medical equipment and systems in compliance with ISO9001:2000 Quality Management Systems and EN ISO13485:2000 Medical Equipment Quality Management Systems.

Remarks:

- ※Every value in this catalogue is a standard value, and it may vary a little from the actual at each site.
- ※The appearances and specifications are subject to change for reasons of improvement without notice.
- ※Certain configurations may not be available pending regulatory clearance. Contact your Shimadzu representative for information on specific configurations.
- ※Before operating this system, you should first thoroughly review the Instruction Manual.

 **SHIMADZU**
Solutions for Science
since 1875

Digital Radiographic Mobile X-ray System

Mobile DaRt
MUX-100D



Digital Radiographic Mobile X-ray System

MobileDaRt

MUX-100D

The highly anticipated Digital Radiographic Mobile X-ray System

Bringing medical facilities one step closer to being "film-less"

By installing a thin 14"×17" Flat Panel Detector (FPD) in the MobileArt-series mobile X-ray system, (which has been widely praised for its high level of operability), we have enabled the digitization of mobile radiography. Images can be validated on the spot, immediately after exposure. There is no need to read or replace cassettes, and image transfer and network printing is a simple, straight-forward task. Radiography can also be performed for several people without having to consider the number of IP cassettes. All these features and benefits add up to a significant increase in the examination throughput attained with mobile radiography. The MobileDaRt Direct Radiographic Mobile X-ray System meets the needs of facilities that are thinking of "film-less" operation.

Installation of high-performance, thin 14" × 17" FPD

Instant validation of reference images

High examination throughput

Compatibility with internal networks

Outstanding operability



Installation of Thin 14" × 17" FPD



This product is equipped with a thin 14"×17" FPD. Instead of using standard cassettes or an IP, simply position the FPD at the region of interest. This will enable high quality mobile radiography with a large field of view. The high-performance FPD ensures high resolution and sharp images. Also, using a 14"×17" FPD makes it possible to cover large examination regions.

size
14" × 17"
thickness
23mm
weight
4.8kg



Major Changes to Workflow

Instant Validation of Reference Images

A reference image is displayed on the MobileDaRt's LCD monitor just three seconds after exposure. This means that images can be validated immediately after exposure without having to wait for a cassette to be read or images to be developed. It also means that images can be instantly retaken if required. This is particularly useful in emergency rooms, as it allows required information for the next procedure to be obtained quickly, substantially reducing the overall time necessary.

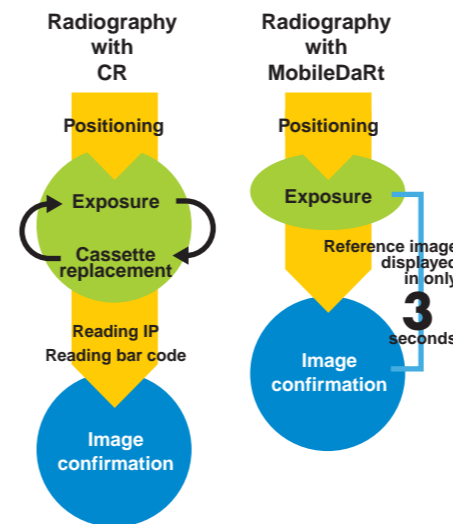


Reading of IP or Bar Code Not Required

The reading of IP cassettes and bar codes, which is indispensable when performing radiography with a CR, is not required. This makes operation simpler and ensures reliable image processing without the risk of mixing up cassettes. Also, the number of images that can be taken in one round is not limited by the number of IP cassettes. Furthermore, it is not necessary to install a large number of IPs or an IP-reading device, thereby allowing more effective use of space.

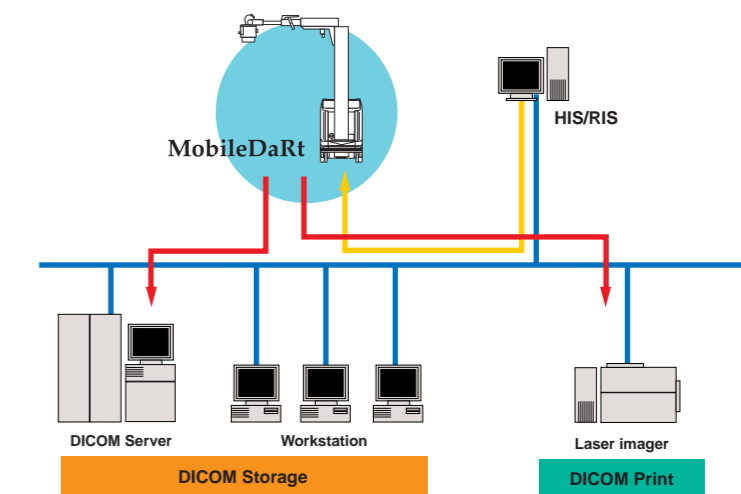
Image Processing on the MobileDaRt's LCD Monitor

After exposure, various types of processing can be applied to the images on the MobileDaRt's LCD monitor. Image processing makes it possible to obtain the required image information selectively.



Simple Network and Printer Output

After the examination, the images can be output to an image server or a laser printer in DICOM format using the operation panel on the MobileDaRt. Procedures such as the development of film cassettes or IP readings are not necessary.



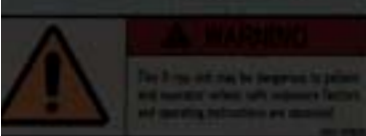
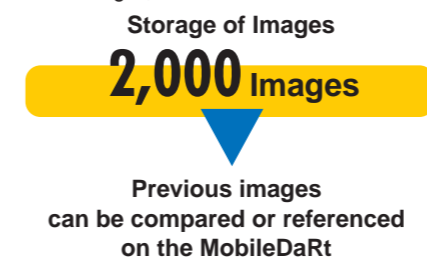
High Examination Throughput

Cassette replacement is not required when repeating exposures or taking images from different views.

Not having to re-insert a cassette means shorter exposure time and therefore less discomfort for the patient.

Storage of Up To 2,000 Images

Up to 2,000 radiographic images can be stored in the MobileDaRt's hard disk that can be compared or referenced to previously taken images, on site.



One of the Easiest-to-Use Mobile Systems Around

Outstanding Operability

As a mobile X-ray system, the MobileDaRt inherits the basic specifications of the MobileArt series, which has been widely praised for its high level of operability. Adding an FPD to the mobility, operability, and image quality, of the MobileArt series, results in a mobile X-ray system that offers the highest level of performance.

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 ones hand, allowing the MobileDaRt to be controlled easily and effortlessly.

Counterbalance system

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



“Inch-mover” buttons

The MobileDaRt 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 automatically. In addition, X-ray irradiation is also automatically disabled during any movement of the MobileDaRt.



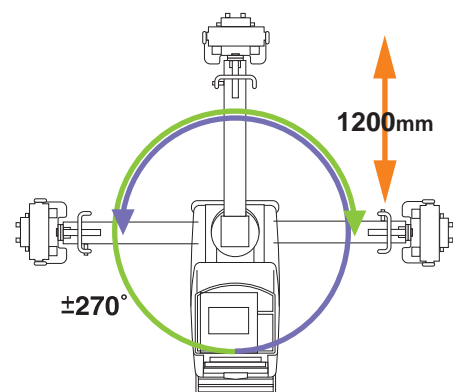
Clear display of X-ray timing with illumination

The MobileDaRt 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.



Wide imaging range

The MobileDaRt has a long stroke on its ultra long arm (up to 1200mm), 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.



High-frequency inverter enables high-quality images

The High-Frequency inverter is capable of operating at up to 60 kHz. The MobileDart generates low-ripple, stable X-rays for fast and highly accurate radiography. This means the MobileDaRt can capture high-quality images with a constant and stable density of X-ray outputs up to 320 mAs.

Maximum frequency

60kHz

Maximum tube voltage

125kV

Maximum mAs

320mAs

