

Navigator DR Care



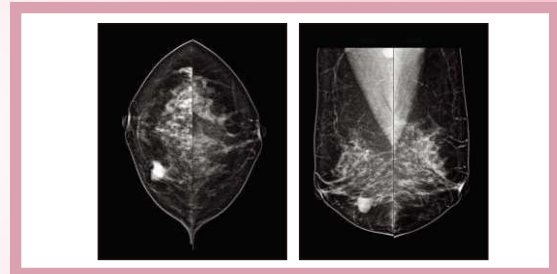
Amorphous silicon (a-Si) large size flat-panel detector, Mo/W target, the full field digital model



<http://www.sco-med.de>

Build Quality, Build Reliability

Navigator DR Care



- This type of equipment uses special amorphous silicon detector for breast mammography and belongs to digital mammography system with elegant and classic integrated shape. Perfect environmental adaption makes it available for indoor and vehicle application for different intended use.

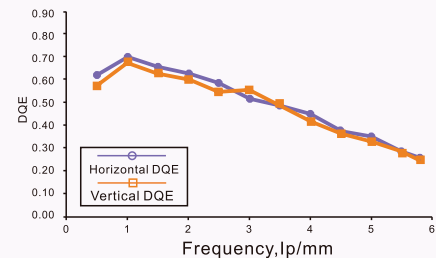
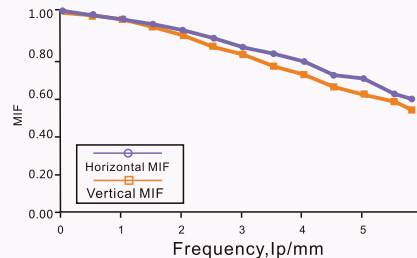
Efficiency and practical acquisition and viewing workstation

- User-friendly GUI(Graphic user interface),support various exposure mode
- User-friendly interface, simple and easy to operate
- Fast transmission speed, comply with DICOM3.0 protocol, can achieve the seamless link with HIS, RIS, and PACS systems.
- Powerful tools for patient management, data gathering and image reconstruction, viewing and measuring, typesetting, printing, storage, provides rich aides for diagnosis



More excellent imaging performance

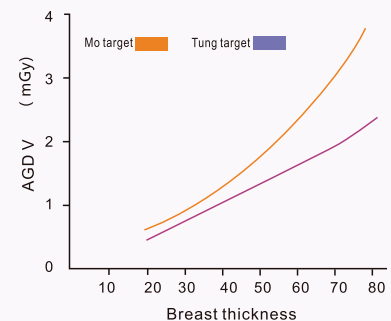
- High MTF and High DQE to guarantee imaging system to collect better image with lower dose



- ➔ With special detector of a-Si for breast mammography, X-ray is transferred to electric signals directly without the additional process of transferring x-Ray to visible and then to electric signal. This eliminates the artifact due to scattering of X-Ray and guarantees the authenticity from the imaging mechanism and can really satisfy the requirements of breast mammography on details. With high DQE, this can guarantee high resolution of image and meanwhile decrease irradiation dose .

AAEC Patent technology, Lower irradiation Dose

- Smart compression system, AAEC patent technology, automatic filtration selection and x-ray field adjusting technology to achieve the balance between minimum exposure and optimum exposure effect and to guarantee image quality with minimum irritation dose.



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Configurations & Specifications of Digital Mammography System

Basic Specification (Cover all brands)

Mammography System

Power input:	5000VA
System voltage:	20 ~ 35 kV in step 1kv
Max.mAs:	630mAs
Imported X-ray Tube:	Molybdenum Anode
Focal spot size:	0.1mm (small) /0.3mm (large)
Support :	ISO-CENTER rotation
Rotation range:	+180° ~ -135°
C-arm supports	dual side digital LCD display
Max. vertical movement range:	580mm ±2%
Compression plate supports	flexible and multi-level smart compression
Spatial Resolution:	6 Lp/mm
Detector type:	Amorphous Silicon Detector
Detector size:	24*30cm
Acquisition Station	Compatible with DICOM 3.0
Focal distance:	650mm
Added filter:	Mo / Rh / AG
Added filter Switch:	Manual/Automatic
Support magnification plate	...
Exposure control:	supports manual exposure and automatic exposure
Power supply:	220 V ~ , ±10%
Power frequency :	50/60Hz ±1 Hz

High-Voltage Generator

Power supply:	220 V ~ , ±10%
Frequency:	100KHz
Tube voltage Range:	20 kV ~ 40 kV
Max. Output:	5 kW
Max. tube voltage:	40kV
Max. tube current:	200mA

X-Ray Tube

Anode Type:	Molybdenum
Focal Spot Size:	0.1 mm (Small)/ 0.3 mm (Large)
Permanent filter:	0.5mmBe
Max. anode speed:	10000rpm
Max. tube voltage:	40kV
Max. tube current:	35mA(small)/140mA(Large)
Max. tube assembly heat content:	320 KJ

C-arm Assembly

C-arm up-down and rotation movement controlled via C-arm control panel
Rotation type of C-arm: ISO-CENTER rotation around the examined part
Rotation range of C-arm: -135° ~ 180°
Distance between focal spot and image reception area:650mm
Support magnification plate
Local display panel on the both side of the stand can indicate rotation angle of C-arm
For safer operation, emergency stop button is located on the top of C-arm

Compression Device

Display:	Local display panel on the both side of the stand can indicate rotation angle of C-arm
Up-down movement :	Power-driven electrically
Compression control:	Continuous activation by foot
Compression mode:	Flexible and multi-level compression, automatic and manual decompression
Compression plate travel range:	5 ~ 268mm
Compression force:	0 ~ 200N
Compression thickness:	5 ~ 268mm

Local Operation and Display

Dual LCD display with backlight on the both side

Parameters displayed:

- rotation angle of C-arm;
 - compression thickness;
 - compression force;
 - KV;
 - mAs;
 - density
 - focal spot selected;
 - exposure mode;
 - Added filter selected;
 - automatic decompression indication;
 - state indication;
 - failure alarming indication
-

Control function:

- KV;
 - mAs;
 - density
 - selection of focal spot;
 - selection of filter;
 - selection of mammographic mode;
 - Selection of automatic decompression after exposure.
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Digital Image Detector

Detector type:	Amorphous Silicon Detector
Material:	Amorphous Silicon
Min. pixel:	85 μ m
Image Matrix Sizes:	2816 \times 3528 pixels
Effective Imaging Area:	24cm \times 30cm
Spatial Resolution:	6 lp/mm
DQE:	50% (1 Lp/mm)

Acquisition Station

Intel CPU frequency \geq 2.4GHz, \geq 4 GB Memory, \geq 500 GB HDD

Medical Display, 1 MP, Brightness 250Cd/m², Contrast 1000:1

Image Detector Self-check and adjustment

Patient Information and Image Management

Auto Explore Control

Acquisition of Explored Image Information

Browsing and Searching of Image

Measure the Distance, Angle, Space of Image and Mark The Selected Area

Image Process after Acquisition: Black and white reverse, rotate and flip, zoom, local editing, enhancement, filtering noise, copies, abridged, etc

DICOM 3.0 Services , supports Print, Store, Query/Retrieve, CDRW, Scheduled Workflow and Patient Information Reconciliation

Automatic failure diagnosis, error code and message indication

Exposure activation: exposure button

Data backup and recovery

Special specification (Cover almost all brands)

Integrated System (Generator Integrated within the main device)

Electric switch between Molybdenum or Tungsten or Argentum added filter

Adjustable X-ray field manually

Off delay of light field indicator can be set via software

C-arm stops automatically at common mammographic position: CC, OBL and LAT

Best specification (Leader or unique)

Rotation angle of OBL position can be set via software

Device can be installed in the movable physical vehicle as max. height of device is less than 110cm

Tested by CFDA for the vehicle usage

Supports 7 types of compression plate

Strong environment adapt, wide-range of work condition:

Temperature: +5℃-+40℃

Humidity: 15%-95%, no condensation

Pressure: 57kPa-106kPa
