

Planmed Clarity™ 2D

Key Facts

- Digital mammography system for conventional 2D imaging, diagnostic imaging and stereotactic biopsies
- Large 24 x 30 cm amorphous silicon detector
- Compact and ultra-slim platform design
- Intuitive Planmed Clarity™ Flow touch screens
- Side Access™ patient positioning
- Full-Field Flex-AEC™ with paddle recognition and auto-collimation
- Optional patented MaxView Breast Positioning System
- Optional Planmed ClarityGuide stereotactic biopsy system
- Field upgradeable to 3D: Digital Breast Tomosynthesis (DBT) upgrade kit

Planmed Clarity™ Full Field Digital Detector

- TFT/PIN Photodiode amorphous silicon detector with direct deposit CsI scintillator
- 83 µm pixel size
- Spatial resolution: 6,024 lp/mm
- 2,816 x 3,584 pixel matrix
- Active detector area 232 mm x 297 mm
- MTF: > 90% @ 1 lp/mm (1x1), > 40% @ 5 lp/mm (1x1)
- DQE: 68% @ 1 lp/mm, 42% @ 5 lp/mm
- 16-bit depth

Acquisition Workstation (AWS)

- High performance Clarity 2D acquisition workstation with Clarity Manager software
- Dedicated Clarity 2D image processing with adjustable post processing parameters
- Integrated to optional motorized Planmed Wave™ acquisition station
- 2.1-megapixel monitor, multiple optional monitors

Image post processing

- 2D imaging uses the Planmed CORE post processing algorithm
- Possibility to adjust in 2D imaging:
 - Contrast
 - Sharpness
 - Brightness
 - Skin line visibility
 - Granularity (parenchyma appearance)
- Dedicated implant post processing mode

X-ray Tube

- High Speed Bi-angular, rotating anode
- Tungsten (W) target
- Anode rotation speed 9700 rpm
- 0.1/0.3 mm focal spot
- Beryllium window of 0.63 mm
- Dual motorized filters: 60 µm Rh, 75 µm Ag with automatic change
- Automatic and manual collimation of FOV
- Automatic paddle recognition to adjust FOV in the middle and in corners
- Bias circuitry to prevent focal spot blooming effect
- Air and oil cooled
- Anode heat capacity 300 kHU. Maximum anode heat dissipation rate 60 kHU/min

- Anode angle: 10 degrees for small focus and 16 degrees for large focus
- Rotating anode diameter: 77 mm
- Tubehead heat capacity 700 kHU
- Tube protected by microprocessor continuous monitoring of the tube load

X-ray Generator

- High frequency 100 kHz constant potential microprocessor controlled 4.5 kW generator
- Anode current:
 - large focus maximum 120 mA
 - small focus maximum 42 mA
- mAs range: 5-600 mAs
- Anode voltage: 23-35 kV with 1 kV step
- 187 - 264 VAC, 50/60 Hz, 15 Amps, single phase
- Automatic line voltage compensation

Exposure Control Modes and Exposition times

- Anatomically adaptable Full-Field Flex-AEC™
- Full-Field Flex-AEC exploits the entire detector area
- Operation modes: AEC, kV-fixed AEC and manual mode
- Separate implant mode available
- Time from button down to preview: 6 seconds
- Time from button down to final processed image: 10 seconds
- Time from button down to ready state: 13 seconds

Clarity Flow™ user interface

- Dual touch screen control panels, one on each side of the unit
- User interface adapts to the imaging mode and user preferences
- Controls the imaging mode, imaging values, unit movements
- Display of used exposure parameters kV, mAs as well as compression force and breast thickness
- Guides the user through system setup
- OneTouch™ workflow for fast screening
- PriorView™ to show prior images on the mammo unit
- On-screen guide to help user

C-Arm

- SID 65 cm
- Motorized, isocentric C-arm rotation with selectable reference projections for quick and easy operation
- C-arm angulation from -135° to +180°
- C-arm vertical travel from 81 – 138 cm
- Motorized telescopic column with two adjustable speeds

- Unique Side Access™ patient positioning provides extra space for patient access and improved patient positioning ergonomics
- Motorized beam collimation: continuously and automatically adjustable radiation field with LED imaging field illumination
- Ergonomic handles provide excellent support for the patient in all projections
- Curved chin guard for maximal patient comfort and ergonomics

Compression

- Motorized dual-phase compression with selectable speed levels
- Patient-friendly degressive compression paddle movement
- Soft paddle for better patient comfort
- Fine-tuned compression adjustment either manually or with foot-controls
- Adjustable maximum compression force up to 20 kg
- Automatic or manual release of the compression after the exposure
- Paddle locking mechanism
- Quick and safety release

Bucky

- Easily attachable ultra-light-weight compact Bucky
- Rounded corners for improved patient comfort and hygiene
- Minimal dead spaces between the detector active area and Bucky's edges
- Tailor-made special grid to further enhance contrast and resolution
- Microprocessor controlled precise grid movement
- 31 l/cm; 5:1 grid ratio (anti-scattered)
- Active detector area 232 mm x 297 mm

Equipment base

- Either free-standing, bolted or optional turnable base
- Elevated rear wheels increase stability
- Integrated color display for projection angle, compression force, breast thickness, traction distance, system status, notifications and alerts
- Dual trailing MaxView™ foot controls to operate compression, traction and vertical drive of the C-arm

General

- Compact size and lightweight (185kg)
- Five selectable and changeable colors for top cover, handle and chin guard
- Standard color off-white RAL 9016 (upper part) and RAL 820-1 (lower part)

Optional Features

Acquisition workstation

- Monitor options: 3 megapixel: Barco Nio Color or Eizo RX360 and 5 megapixel

Geometric Magnification

- Light-weight magnification platform with integrated abdomen shield
- 1.6x or 1.8x magnification factors

MaxView™ Breast Positioning System

- Integrated feature and design
- Integrated MaxView™ lower module and upper module with in/out control buttons for both sheets

- Graphical and digital display of traction distance on dual touch panels and base display
- Pulling velocity 3-5 mm/s
- Max pulling distance 50 mm
- Dedicated, radiolucent, clear plastic upper and lower sheets
- MaxView™ foot controls for driving both sheets simultaneously
- Safety release

Planned Wave™ acquisition station

- Technologist center for Planned Digital Mammography and DBT
- Housing for the acquisition workstation and isolation transformer
- Motorized vertical movement for excellent ergonomics
- Optional integrated radiation shielding glass 0.5 mm Pb eqv.

Planned Radiation Shield

- Planned radiation protection screen with 0.3 mm Pb eqv. or with 0.5mm Pb eqv.

Planned Envision™ Review Workstation

- Review workstation for Planned Digital Mammography and DBT
- High-resolution displays
- Review workstation computer with GPU
- Customizable workflow for softcopy reading
- Optional Planned DigiPad™ short-cut panel

Planned ClarityGuide™ stereotactic system

- Light-weight biopsy unit
- Precision targeting with on screen guidance

Upgrade to Planned Clarity 3D

- Add-on TomoMarker™ technology
- Tomo paddle
- High performance Clarity 3D acquisition workstation with Clarity Manager software
- Clarity 3D iterative reconstruction and image post processing
- Embedded software upgrade enabling Continuous, Sync-and-Shoot™ tomosynthesis imaging sequence
- DBT calibration/quality assurance kit

Configuration

Planned Clarity 2D full field digital mammography x-ray unit	FED00866
Surface colour Peach	FED00870
Sunflower	FED00871
Orchidea	FED00874
Ocean	FED00873
Lime	FED00872
Digital receptor (Planned Clarity)	FED00894
Clarity Bucky 24 x 30 cm	FED00876
Large 24 x 30 cm paddle	FED00899
Small 19 x 23 cm shifting paddle	FED00882
Free standing base for Clarity	FED00885
Transportation barrow handle without wheels	FED00585
Acquisition workstation color display (2 MP)	FED00675
Acquisition workstation PC with Clarity Manager software for 2D	FED00907
Packing for Clarity	FED00929
Packing for acquisition workstation (AWS)	FED00320
User's manual	
Installation manual	
Technical manual	

Dimensions

