Planmed Clarity™ S

Key Facts

- **Full Field Digital Mammography system for screening and diagnostic imaging**
- **Large 24 x 30 cm amorphous silicon detector**
- **Compact and ultra-slim Bucky**
- **Intuitive Planmed Clarity™ Flow user interface on acquisition workstation**
- **Full-Field Flex-AEC™ with paddle recognition and auto-collimation**
- **Possible DBT upgrade available**

Planmed Clarity™ Full Field Digital Detector

- TFT/PIN Photodiode amorphous silicon detector with direct deposit CsI scintillator
- 83 μm pixel size
- 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
- Intuitive Flow™ user interface
- Integrated to optional motorized Planmed Wave™ acquisition station
- 2.1 MP color monitor. Multiple optional monitors available, please see acquisition workstation specifications.
- 16-bit acquisition and image storing

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
- Air and oil cooled
- Anode heat capacity 300kHU, anode heat dissipation rate 60 kHU/min
- Tubehead heat capacity 700 kHU
- Tube protected by 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, uses a standard wall socket
- 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

- User interface adapts to the imaging mode and user preferences
- Controls the imaging mode, imaging values, unit movements
- Guides the user through imaging sequences
- Display of used exposure parameters kV, mAs as well as compression force and breast thickness
- OneTouch™ workflow for smooth screening
- 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
- Motorized beam collimation: continuously and automatically adjustable radiation field with LED imaging field illumination
- Ergonomic extended handles provide excellent support for the patient in all projections
- Curved chin guard for maximal patient comfort and ergonomics

Compression

- Motorized compression with 5 selectable speed levels

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- Patient-friendly dual phase compression, with 5 degressive compression rates
- Soft paddle for better patient comfort
- Fine-tuned compression adjustment
- Adjustable maximum compression force up to 20 kg
- Automatic or manual release of the compression after the exposure
- Paddle recognition and locking mechanism
- Quick and safe release in power-off situations

Bucky
- Easy-to-attach, ultra-lightweight 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 for enhancing contrast and resolution
- 31 l/cm; 5:1 grid ratio (anti-scattered)

Equipment base
- Free-standing, bolted or optional turnable base
- Retractable wheels on the base for increased mobility
- Integrated color display for Flow user interface projection angle, compression force, breast thickness, system status, notifications and alerts

General
- Compact size and lightweight (185kg), with no external power cabinet
- Five selectable and changeable colors for top cover, handle and chin guard

Optional features

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

Geometric Magnification
- *Lightweight magnification platform incl.abdomen shield*
- *1.6x or 1.8x magnification factors*

Planmed Wave™ Acquisition Station
- *Technologist center for Planmed 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.*

Shielding
- *Planmed radiation protection screen with 0.3 mm Pb eqv. and optional 0.5 Pb eqv.*

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

Configuration

Planmed Clarity S full field digital mammography x-ray unit		FED01111
Surface colour	Peach	FED00870
	Sunflower	FED00871
	Orchidea	FED00874
	Ocean	FED00873
	Lime	FED00872
Digital receptor		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)		FED01009
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		

42 cm
16.5"

152 cm
59.8"

-135...+180°

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78 cm
30.7"

100 cm
39.4"

0...16 cm
0...6.3"

157...217 cm
61,8...85.4"

81...138 cm
31,9...54.3"

76 cm
29.9"

105 cm
(41 in)

ClaS_3.eps

104 cm
(41 in)