

# Lucerna RF-TILT A80 DYNAMIC R&F

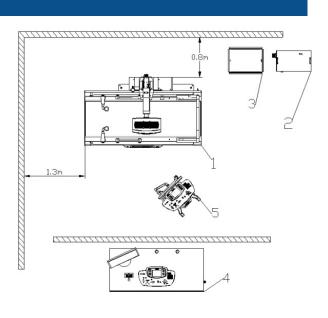


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### SYSTEM CONFIGURATION

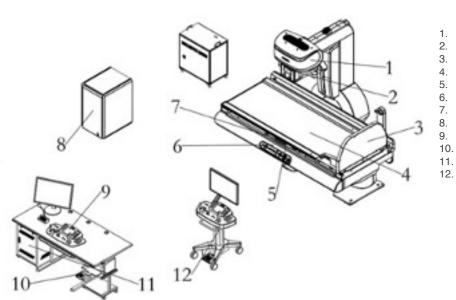
- Dynamic Flat Panel Detector
- Diagnostic Workstation
- High Frequency Generator
- X-Ray Tube
- Automatic Collimator
- Remote control radiographic table
- JPI anti-scatter grid
- Control console
- Accessories



 1. Remote control radiographic table
 2. Control cabinet

 3. HF Generator
 4. Workstation & Console
 5. Control console

 trolley.
 5. Control console
 5. Control console



- X-Ray Tube assembly
- Collimator
- Patient feet support
- Remote control radiographic bed
- Anti scatter grid
- Bed side control panel
- Flat panel detector HF Generator
- Console
- Fluoroscopy foot switch
- . Computer cabinet
- Control console trolley

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## **DYNAMIC FLAT PANEL DETECTOR**

- Model GMI Apollo 4343D
- Detector type: amorphous Silicon (a-Si) / Cesium Iodide (CsI)
- Acquisition area: 430x430mm (17×17 inch)
- Pixel Matrix: 3072×3072
- Pixel size: 139 μm
- Dynamic pixel matrix: 1536X1536(6fps); 1024X1024(12fps); 768x768/342x342(30fps).
- Pulsed Dynamic pixel matrix: 1024X1024(8fps).
- DQE: 60% @ 0.5lp/mm
- MTF: 82% @ 0.5lp/mm
- A/D: 16 bits
- Spatial Resolution:  $\geq$  3.5 lp/mm
- Image Acquisition Time: < 2s
- Image Processing Time: < 3s
- X-ray Voltage Range: 40-150 KV
- Communication: GigE
- Input voltage: 24Vdc
- Detector dimensions: 490 x 490 x 41.5 mm

## **DIAGNOSTIC WORKSTATION**

- CPU: Intel
- RAM: 8GB
  - o Customizable
  - STORAGE: 1000GB
    - Customizable in capacity and type (SSD)
- GPU: Nvidia Quadro P Series
- Monitor: 24" Full HD 10bit color display
- Customizable
   CD/D/D reader and human
- CD/DVD reader and burner
- Desk dimensions: 1700x800xH720mm



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### GMI DxRayDiagnost Software

- Case management function: management of patient information, exam information and images.
- DICOM3.0 compatible: Patient registering from HIS/RIS and data sending to PACS system, with RDSR.
- Advanced image processing based on preloaded APR programs.
- Real time automatic WW/WL adjustment.
- Real time ROI (region of interests) clipping.
- Real time enhancement.
- Selecting image and rotation according to different body postures.
- Displaying patient information, examination information, device information and image information Image processing.
- Adjustment of window width, window level, Gamma, and LUT curve.
- Positive and negative film switchover, image zoom, translation, mirror image, rotation, magnifying.
- Image enhancement, noise reduction: Scheme and level of image enhancement and noise reduction can be adjusted according to different body postures.
- Image labeling function: including drawing straight line, rectangle, polygon, arrow and text.
- Real time reminding of the free space of image disk of the system.
- DICOM SCU: support sending image to any PACS and workstations following the standard DICOM3.0;
- Receiving SCP server with DICOM: support receiving image following Standard DICOM3.0 from any workstation.
- iEAE: intelligent Efficient Automatically Enhancement. This technology of Image processing has greatly improved the consistency, softness, spatial gradation, and texture fineness of image.
- iGCR: intelligent Grayscale Compensation of ROI. iGCR can recognize the effective exposure area through ROI recognition technology and compensate the gray of the region. To enhance the RAW image processing under different exposure parameter and keep the image quality at higher level.
- iTE: intelligent Tissue Equalization. iTE Intelligent Tissue Equalization analyzes organizational structure of the image, by using gray optimization and dynamic range compression technology, provides the best visual effects of bone, soft tissue and overlapping structure.
- iCED: intelligent Context-Enhancing Denoise. iCED use the Motion-Compensated Temporal filtering technique to reduce the noise under fluoroscopic image processing without blurring and artifacts. It can intelligently identify useful texture and detail information in the image, and significantly suppress the noise at the same time it keeps the edge enhancement and contrast enhancement. To soften the image, enhance the depth of delicate texture after processing.
- iMR: intelligent Metal-Recognition. It can intelligently analyze and recognize metal areas in the image, and deal with them in special image processing, to avoid artifact around the metal and misdiagnosis.
- iDG: intelligent DeGrid. It can intelligently recognize the artifacts of the grid to keep the outstanding image effect.
- Fully automatic image Stitching. It is of great clinical significance for orthopedic department to obtain important diagnostic basis before clinical operation and provide accurate reference for postoperative evaluation.

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### **High Frequency Generator**

- Model: GMI XDRP80
- Nominal supply voltage: 3-phase 380V
- Input Power Frequency: 50/60Hz
- Input power: 120kVA
- Output power: 80kW (100KV,800ma,0.1s)
- Inverter frequency: 480kHz
- Mass weight: 166kg
- Supports AEC function
- Supports ABS function

#### Radiography:

- Tube voltage: 40 150kV
- Tube current: 10 1000mA
- mAs: 0.4 1000mAs
- Time range: 0.001 10.0s

#### Fluoroscopy:

- Tube voltage: 40 125kV
- Continuous tube current: 0.5 20mA
- Pulsed tube current: 5 50mA

# X-Ray Tube

- Model: Siemens SV150/40/80 C-100
- Focus: 0.6/1.0mm
- Voltage: 150 kV
- Anode Angle: 12°
- Anode Heat Capacity: 450kJ (600kHU)
- X-ray Tube Assembly Heat Capacity: 1800kJ (2430kHU)
- Input Power: 47kW / 85kW (SF / LF)
- Rotating Speed: 10800rpm
- Filter: Inherent 1.5 mmAl @75kV



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# COLLIMATOR

- Model: GMI XS-F
- 5" Touch Display with UI
- Auto-collimation
- Manual and electric operation
- Max. voltage: 150kV
- Irradiation field: 430×430mm (SID=115cm)
- Leakage radiation: < 0.5mGy/h
- Field light: LED
- Average illumination: >160 lx (SID=115cm)
- Auto turn-off after 30s
- Integrated webcam for real time patient monitoring from the operator room.
- Filter: 0.1/0.2/0.3 mmCu
- Weight: 9.5Kg
- Dimensions: 290mm\*230mm\*191.5mm



## **REMOTE CONTROL RADIOGRAPHIC TABLE**

- Model: GMI DC-DT-4
- Bed Size: 2100 x 850 x 715mm (L x W x H)
- Attenuation equivalent: <1.7mmAl
- SID: 1.15m 1.8m
- Bed tilting range: -15° +90°
- Column tilting range: -35° to +35°
- Tube Assembly rotation: -90° / 0° / +90° (manual)
- Column longitudinal movement: 1300mm
- Bed lateral movement: 250mm
- Max load: 200kg
- 360° patient rotation platform
- One-Key Preset: Standing Position or Lying Position
- Form of motion: motor-driven from operator console
- All motorized operation includes soft Start & Stop
- Compressor max. compression force: 110N
- The radiographic table can be controlled from the operator console, the console trolley(optional), the bed side control panel and from the collimator touch interface.

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# ACCESSORIES

- Patient feet support platform with motorized 360° patient rotation.
- Detachable shoulder rest and handles for patient safety.
- Detachable patient harness.
- Auto-levelling cup holder to be placed on the system column.
- Compressor with rigid rubber compression cone for patient comfort.
- Integrated webcam for real time patient monitoring from the operator room.
- Integrated intercom system.
- JPI Grid-1000 with 120cm F.D.

### **Optional accessories:**

- Control console trolley
  - o Adjustable height: 770-1170mm
  - Completely integrated with the main console, can be operated seamlessly in the operation room and integrates all the features.
  - Radiography and Fluoroscopy switch and pedal included.
  - 24" 10bit Full HD monitor integrated with the diagnostic software, possibility to mimic the main console display or to extend the functionality.
- JPI Grid-1000
  - Different F.D. available for optimal examination results.
- LF-TOMO
  - The A80 large field linear tomosynthesis allows the user to better analyze the patient and reduces the need for CT scan follow up in case of unseen fractures or nodules.
  - Continuous scan up to a 1100mm coverage in less than 30seconds.
  - Innovative linear scan design to reduce possible artefacts generated by the standard tube oscillation technique.

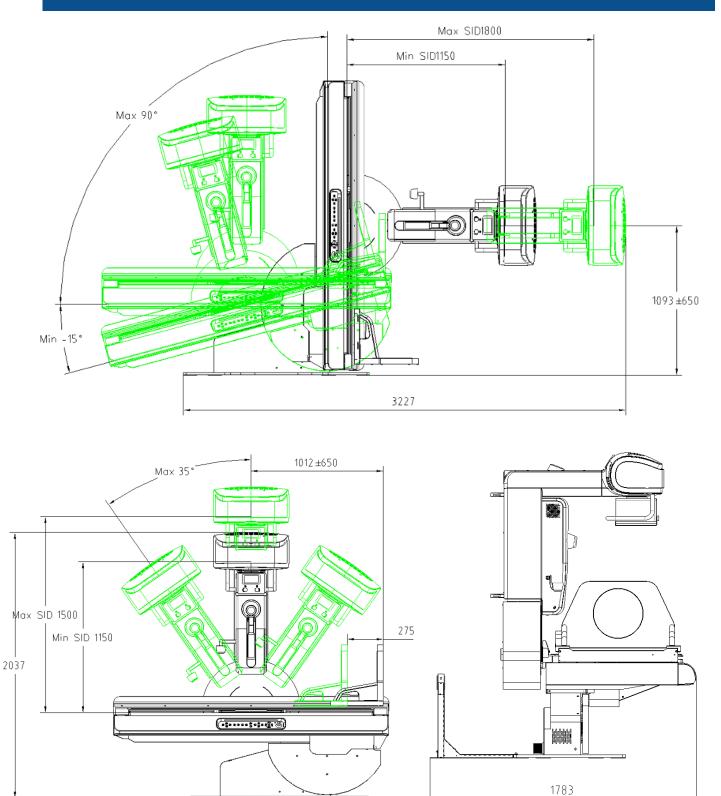


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# LAYOUT



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