

## FM-MG600 Digital Mammography System



#### **Packing Details:**

Item	Length * Width *height/mm	Weight/kg
Host machine (without packing)	2000 *560 *940	150
Operation platform (without packing)	1500 *930 *500	85
Host machine (packing)	2160 *690 *1150	210
Operation platform (packing)	1630 *970 *830	140

### I. Application

A mammogram is a special, low-dose X-ray technique used to take a picture of the breast, detecting and diagnosing any abnormal lumps or masses in breast tissue. It is one of the best tools for the early identification of breast cancer. With early identification, breast cancer can be cured while in the first stage, and recovery is more likely.



# II. Specification:

Item	Parameter	Remark
X-ray	Generator Type: High Frequency Inverter 80kHz	Self-developed and
Generator	Input Power: Single phase 220VAC, 50/60Hz	world advanced
	Radiographic Ratings:	all-solid-state high
	Large Focal Point 20-35kV/10-510mAs	frequency high voltage
	Small Focal Point 20-35kV/10-100mAs	x-ray generator
	Power Rating: 6.2kVA	
X-ray Tube	Focal Spot Size: Dual Focus 0.1 / 0.3mm	Model: China LR01
	Target Material: Molybdenum (Mo)	China tube for optional
	Port Material: Beryllium (Be)	
	High-speed anode drive: 2800 /10000rpm	
	Target angle: 10°/16°	
	Anode Heat Storage: 210kJ (300kHU)	
	Anode Cooling: Air cooling	
	Filtration: Mo (0.03mm), AI (0.5mm)	
Radiographic	C-ARM: Vertical Movement: 590mm	Electric Isocentric
Stand	Center of electric rotating C-arm	rotating
	Automatic return function by one key	
	Rotations Degree: +90°~-90°	
	Automatically released after the exposure pressure settings	
	display	
	Compression flexible, stepless speed.	
	Max. pressure: 200N	
	Max. travel: 150mm	
	SID: 650mm	
Flat Panel	Detector material: Amorphous silicon	China Flat Panel
Detector	Effective coverage of detector: 18x24cm	Detector
	Pixel matrix: 3072x1944	24x30cm for optional
	Limit of spatial resolution: 6.0Lp/mm	
	DQE value: 70%	
	dynamic range: 14bit digital output	
	pixel size: 75µm	
	High voltage Synchronizer trigger: BNC	



	Output: Camera Link or Ethernet	
	Working condition: 10℃-40℃	
	storage environment: -10℃-50℃	
Bucky	Size: 374*304*65mm	
housing and	Stepless speed regulating range: 0~6cm/s	
movement	Movement range: 0.5∼2cm	
device	Grid Size: 24x30cm	
	Grid ratio: 5:1	
	Grid density: 30lp/cm	
	Focal distance: 650mm	
Image	CPU≥Intel Core Duo 2.60GHz	Configuration
acquisition	Hardware ≥250G high speed Hardware	including Diagnose
workstation	Memory≥2G	digital workstation
	Display card ≥512MB	
	high brightness high-contrast LCD,1280*1024 Pixel resolution	5M medical monitor
	Network interface Work-list	for optional
	DICOM3.0 transmission	
	100/1000 Gigabit Ethernet	
	Software	
	Imaging software package DMOC V1.0	
Others	Line Voltage	110V for optional
	220V ac±10%@25A,Single phase	

# **III.Configuration:**

No.	Item	Quantity
1	X-ray Tube	1
2	X-ray Generator	1
3	Gantry assembly	1
4	C-ARM	1
5	Bucky movement device	1
6	Flat panel detector	1
7	Image acquisition workstation	1
8	Review work station	1
9	Paddle switch	2



10	Exposal switch and connected line	1
11	Power wire	1
12	Grounded wire	1
13	Fuse	2
14	Operation manual	1
15	Maintenance Reference Manual	1

#### **IV.Features:**

- 1. Adopt specialized mammography flat panel detector digital imaging technology.
- 2. Full size digital mammography x-ray imaging.
- 3. Unique adopt all-solid-state high frequency high voltage generator. This technology has got the PATENT IN THE USA.
- 4. The safest mammography at high voltage. There is a built-in X-ray ignition coil in host machine, high-voltage power lines less then 25cm.
- 5. Mammography image acquisition control workstation, DICOM 3.0.
- 6. Electric Isocentric rotating C-arm with a unique automatic back to center function.
- 7. Optional the third generation imported moving grid.
- 8. Optional auto/semi-auto/manual, three kind exposure modes.
- 9. Optional image output device: digital film printer.
- 10. A total of 3 pieces of large size full color LCD screen display, operation table 8 inch LCD screen is a touch key.
- 11. Comfortable Compression:

When some degree of pressure is required for radiography, it allows you to presser the appropriate pressure(up to a maximum of 20kg) and is equipped with MICOM Control's Soft-touch system which is designed to minimize the discomfort of the examine with in the pressure range.

Tissue Compression: Manual and Motorized (Max 20kg)

Compression Force and Thickness Data Display

Micro Control's Compression

Automatic Release

#### 12. Optional Intelligent Automatic Exposure Control (AEC)

With the Automatic Exposure Control system, it is possible to produce images with reliable intensity suitable for and film, screen, or method of radiography.

Furthermore, it greatly enhances the convenience of radiography by embedding the Full-AEC function which is capable of utilizing the Auto kV

Type: Solid-State Detector

Microprocessor Control



Density Adjustment: 16 density steps

## **V.Diagram**



China Flat Panel Detector (18\*24cm)



**Rotation of C-arm** 



IAE C339V X-ray Tube



## VI.Digital workstation:



Image Processing: Negative, Zoom, Roam, Select, Mirror, Counterclockwise rotation, Clockwise rotation, Typesetting image, Cut out, Report Map and so on

### Digital workstation

#### System introduction:

- 1.Login, Main interface
- 2.Image Processing
- 3.Reporting Interface
- 4.Statistics
- 5.System Management
- \*More details refer to User Manual