

China Resources Wandong Medical Equipment Co., Ltd.

**High Frequency 50kW Digital RF System
- HF51-5**



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WDM: A successful journey of more than 60 years



China Resources Wandong Medical Equipment Co., Ltd. (Wandong, previously Beijing Wandong Medical Equipment Co., Ltd.) was established in 1955, and has been listed on the Shanghai Stock Exchange since 1997. Headquartering in High-Tech industrial park in Beijing, Wandong occupies an area of more than 100,000 square meters as its modern production base and R&D center, and has 30+ branches in China and a wide sales and service network in about 70 countries all over the world. With the 60 years dedication to the medical imaging, Wandong has made brand name of “WDM”, a well-known brand in the world.

As one of the largest radiology imaging equipment manufacturers in the world, Wandong has wide range of product lines including General Radiography, Mobile X-ray & C-arm, Digital Radiography (DR), Digital Fluoroscopy (DRF), Digital Mammography, Cath-Lab, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) machine, and the annual production capability is more than 6,000 units.



System Feature

Microprocessor controlled X-ray Generator considerably improved the exposure repeatability and operating efficiency, and benefits the X-ray tube assembly with longer life cycle. The Generator adopts high-level self-diagnostic procedure that makes maintenance and troubleshooting much easier.

High-frequency generator benefits customer with less radiation dose, shorter exposure time, more precise exposure conditions and better repeatability.

The movement of diagnostic table is controlled by frequency converter; that makes moving smooth and stable with low noise. Minimized distance between tabletop and intensifying screen makes image quality improved than ever.

InvaRay digital imaging platform, which developed by WDM, provides you with centralized system control. On single LCD screen, the user-friendly interface displays all exposure parameters and settings same as what you see on a traditional control panel, moreover, by simple mouse clicks you can complete the whole procedure including exposure setting, image acquisition and processing, as well as Dicom functions. Your work flow will be greatly improved.

InvaRay digital imaging platform provides abundant acquisition programs and image processing functions. Maximum 30fps variable acquisition rate for different clinical applications.

1. Configuration:

- Standard configuration

No.	Component	Part Number	Brand	Quantity
1	HV Generator	GFS502-8	WDM	1
2	X-ray Tube	E7252X	Toshiba	1
3	HV Cable	DL7516-1A	WDM	1
4	Diagnostic Table	ZC25SY-2	WDM	1
5	Collimator	XS5-1	WDM	1
6	Grid	JPI	JPI	1
7	Image Intensifier	TH59438	THALES	1t
8	Work Station	Computer	WDM	1
		19' Medical LCD Monitor		
		InvaRay TX-DSI1000		
9	Intercom System	F174.FJ.1A	WDM	1

- Optional Components

No.	Component	Part Number	Brand	Quantity
1	Rotation pedals	F199.23A	WDM	1
2	Table-side operating system	F832C	WDM	1

2. Specification:

- Standard Configuration

Parts	System description
Generator	<p>Part No.: GFS502-8</p> <p>Power: 50kW</p> <p>Inverter Frequency: 50kHz</p> <p>Radiography kV range: 40~150kV</p> <p>fluoroscopy kV range: 40~120kV</p> <p>Radiography mA range: 25~630mA</p> <p>fluoroscopy mA range: 0.5~5mA</p> <p>mAs range: 0.4mAs~500mAs</p> <p>Exposure time: 1.0ms~5000ms</p> <p>Automatic fluoroscopy: Automatic brightness control(ABC)</p> <p>Network: Integrated display of generator parameters and images</p> <p>Self-diagnostic function</p>
X-ray Tube	<p>Part No.: E7252X</p> <p>Rated Focal Spot Value: 0.6mm / 1.2mm</p> <p>Anode Input Power: 27 / 75 kW</p> <p>Anode heat capacity: 300kHU</p> <p>Anode Speed: 9700rpm</p> <p>Optical anode Angle: 12°</p>
Diagnostic table	<p>Part No.: ZC25SY-2</p> <p>Table Tilting Range: -25°~+90°</p> <p>Transfer Movement of Table Top: 210mm</p> <p>Focus-file distance: 1000mm / 1500mm</p> <p>Movement of Spot Film device: 800mm</p> <p>Cassette size: 388mm×464mm(14"×17")</p> <p>FILM DIVISION (optional): half, one-third, quarter divisions</p> <p>Tabletop patient weight capacity: 200kg</p> <p>Grid Size: 388mm×464mm(14"×17")</p> <p>Grid Type: Fixed, N40, r10, f120cm</p>

Collimator	<p>Part No.: XS5-1</p> <p>Size: 250mm×224mm×250mm</p> <p>Projection Field: SID=65cm:Max 35cm×35cm Min 0cm×0cm</p> <p>Mode of Adjustment: Manual / Auto</p>
Image Intensifier	<p>Part No.: TH59438</p> <p>Field: 9" (3 fields)</p> <p>Resolution: 54/62/70lp/cm</p> <p>CCD pixel: 1 Million</p> <p>CCD Acquisition: 12bit</p>
WORKSTATION HARDWARE	<p>Hardware Specification:</p> <p>CPU: Intel Core 2 Duo \geq2.6GHz</p> <p>Image acquisition memory: 2GB, Hard disk:\geq320GB</p> <p>CD-ROM: DVD Burning</p> <p>System Interface: USB, RS232, LPT, 100MB Network Interface, DVI/VGA Display output interface</p> <p>Monitor: 19" Monochrome Medical Monitor: Resolution 1280×1024, Grayscale:1024</p> <p>Operating system: Windows7</p> <p>Software Specification:</p> <p>InvaRay TX-DSI1000</p> <p>Image acquisition field: 9" / 6" /4.5" Variable</p> <p>Fluoroscopy acquisition: 1k×1k×12bit, 30FPS, 15FPS</p> <p>Spot film acquisition: 1k×1k×12bit, 7.5, 5, 3.7, 3, 2, 1 FPS, Single frame</p> <p>Image measurement: Image calibration, length, area, angular measurement</p> <p>Image analysis functions: Histogram</p> <p>Image annotation: Arrow, text, measurement annotation</p> <p>Image playback function:</p> <p>Continuous or single frame playback</p> <p>Real-time playback at different acquisition rates</p> <p>Image zooming and roaming</p> <p>Mouse roller controlled playback</p> <p>Image send to reference display</p> <p>Right click to control variety of image processing functions</p>

	<p>Image storage function: Real-time image storage</p> <p>Patient data protection: Support data lock protection</p> <p>Hard disk capacity management: Displays the remaining hard drive space and the estimated number of images can be stored</p> <p>Data management: hierarchical data management</p> <p>Management of patient data: patient information list, create, edit, delete, query, and lock</p> <p>Data information retrieval: Support the patient's name / collection site / acquisition time, multi-criteria query</p> <p>Image Name remark, sequence name remark</p> <p>Image output in windows compatible format: Support Windows compatible image format (AVI/BMP/JPG/DICOM)</p> <p>Image printing and burning:</p> <p>Printing device management: support multiple printers, compatible with DICOM laser camera</p> <p>Printing Format: Support a variety of film sizes and different layout with vertical and horizontal divisions</p> <p>Printing Preview: preview process before printing</p> <p>Support image burning with or without image mini-browser</p> <p>Support DICOM compressed / uncompressed image burning and Windows compatible image burning</p> <p>Dicom Features: fully support DICOM 3.0</p>
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- Optional Components:

Parts	System Description
Rotating pedals	Part No.: F199.23A Remote-control direction of rotation
Reference Display	Part No.: F832C Monitor specification: 19" Monochrome Medical LCD Resolution Ratio 1280 × 1024, Gray Scale 1024 Including Monitor, DVI Cable, Dolly, Foot Switch, Wiring Board