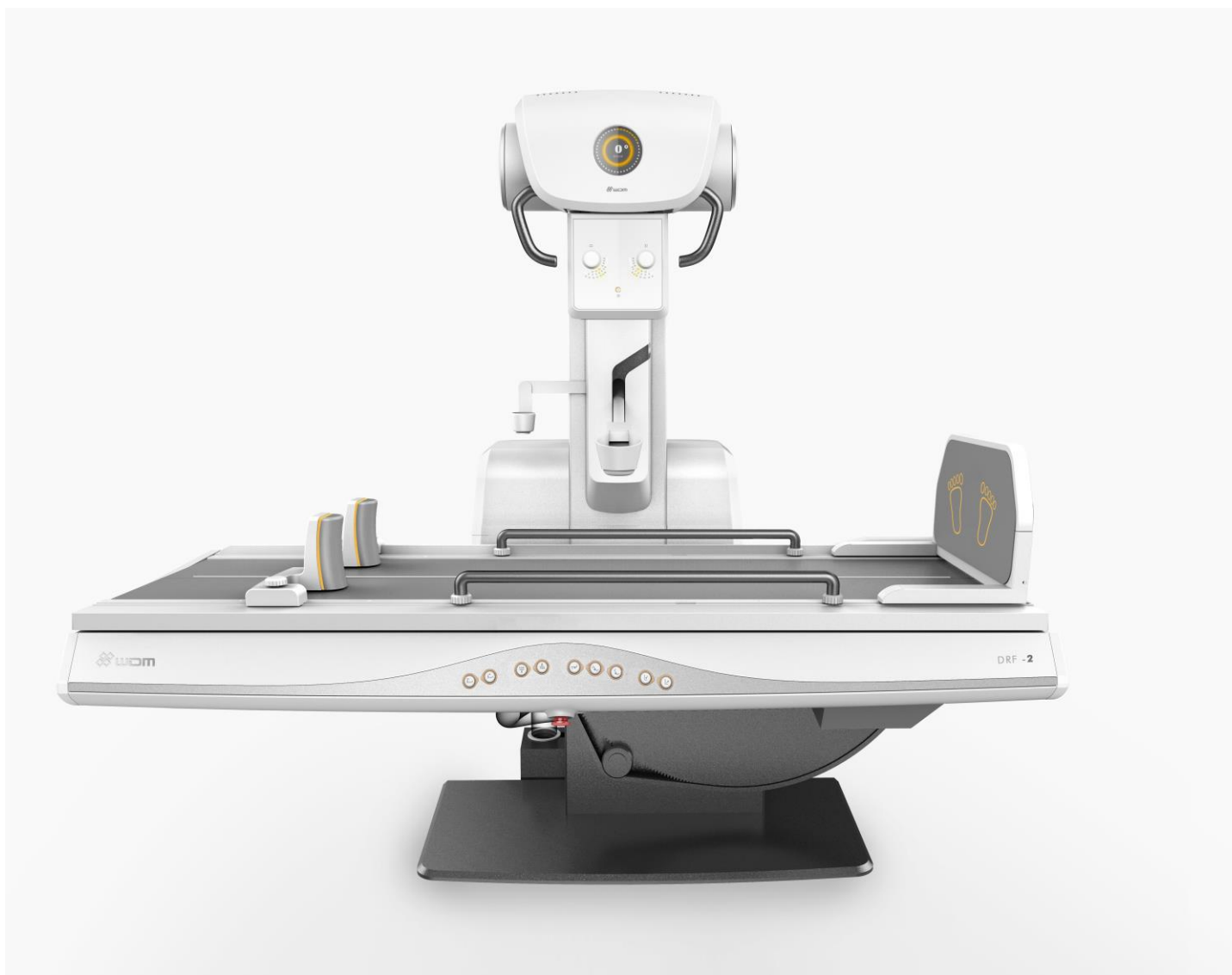


Beijing Wandong Medical Technology Co., Ltd.

**High Frequency 80kW Digital Remote-controlled X-ray System
- DRF-2**



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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.



The Development of Wandong's RF System

- Fluorescent Screen
- Medical Television
- Image Intensifier
- Flat Panel Detector



The Fourth Generation Versatile Digital RF System: DRF-2

Unique combination of Imaging Intensifier digital fluoroscopy and digital FPD radiography, to realize 17x17" spot-film with DR image quality in 1.2 seconds (shifting time from fluoroscopy to spot-film).

Efficient: New operating system, better image quality, optimizing and simplifying the process.

Multi-function: Realized the integration of Digital Fluoroscopy and Digital Radiography.

Digital: "InvaRay" digital imaging platform realize DICOM 3.0 image acquisition and processing.

Convenience: Automatic shifting between Fluoroscopy and Digital Radiography during operation.

Cost-effective: Reasonable configuration brings highest diagnostic image quality with relatively lower cost compared to a Dynamic FPD R/F system.

Configuration List:

- **System Standard Configuration**

No.	Component	Part Number	Brand	Quantity
1	High Frequency Generator	GFS802-3	WDM	1 SET
2	X-ray Tube Assembly	E7254FX	Toshiba	1 SET
3	High-voltage Cable	75kV/16m	Claymount	1 SET
4	Diagnostic Table	ZC25SY-3	WDM	1 SET
5	Collimator	XS5-2	WDM	1 SET
6	Flat Panel Detector	WDF 4343R	WDM	1 SET
	Image Intensifier	E5830SD-P6A	Toshiba	1 SET
7	Image Acquisition Workstation	PC Console	WDM	1 SET
		19" Monochrome Medical LCD		
		Invaray TX-DSI2000 Software		

- **Software Standard Configuration**

No.	Component	Version	Manufacturers	Quantity
1	WD-Acquire	V2.0	WDM	1 SET
2	WD-CAN	V2.0	WDM	1 SET

- **Optional Configurations:**

No.	Part Name	Model	Brand	Quantity
1	Flat Panel Detector	FDX 4343R	TOSHIBA	1 SET
2	Rotating pedal	F199.23A	WDM	1 SET
3	Reference Display	F832D	WDM	1 SET
4	WD-REPORT Workstation	WD-REPORT Workstation	WDM	1 SET

I. Technical Specifications:

Standard Configuration

Part Name	System Description
Generator	<p>Part Number: GFS802-3</p> <p>Power: 80kW</p> <p>Generator Type: High Frequency 240kHz</p> <p>Radiography kV Range: 40~150kV</p> <p>Radiography mA Range: 10~1000mA</p> <p>Fluoroscopy kV Range: 40~120kV</p> <p>Fluoroscopy mA Range: 0.5~6mA</p> <p>Exposure Time: 1ms~10s</p> <p>mAs: 0.1mAs~1000mAs</p> <p>AEC interface, APR</p> <p>Pulse Fluoroscopy Rate: 15,30pps</p> <p>Power Supply : 380VAC 3-phase</p> <p>Error Self Diagnosis Function</p>
X-ray Tube Assembly	<p>Part Number: E7254FX</p> <p>Rated Output : 40/102 kW</p> <p>Rated Focal Spot Value: 0.6mm/1.2mm</p> <p>Anode Heat Storage Capacity: 400kHU</p> <p>Anode Rotary Frequency: 9700rpm</p> <p>Heat Storage of Tube Assembly: 1339 kHU</p> <p>Target Angle: 12°</p>
Diagnostic Table	<p>Part Number: ZC25SY-3</p> <p>Table Tilting Range: -25°~+90°</p> <p>Table Size: 2100×680mm</p> <p>Transfer Movement of Table Top: 210mm</p> <p>FFD: 1000mm,1500mm</p> <p>Movement of Spot Film device: 800mm</p> <p>Table Top Load Bearing: 200kg</p> <p>Grid: Fixed, N80, r10, f₀130cm</p>
Collimator	<p>Part Number: XS5-2</p> <p>Radiation Field [Max SID = 65cm]: MAX 350×350mm, MIN 0×0mm</p> <p>Manual/Automatic/Semi-automatic</p>

<p>Image Intensifier and CCD digital camera</p>	<p>Part Number: E5830SD-P6A 9 inch 3 fields CCD pixel: 1 million CCD Acquisition: 12bit</p>
<p>Flat Panel Detector</p>	<p>Part Number: WDF 4343R Receptor Type: a-Si Size: 470mm×494mm×38mm Effective size: 43cm×43cm (17"×17") Weight: 7.5kg Pixel Matrix: 3028(h)×3028 (v), Pixel size: 142um A/D converter: 16bit Spatial Resolution: 3.4lp/mm, Image construction time: 5s Ambient Temperature: -15°C~ 55°C DQE:≥70%, MTF: ≥58% Data Transfer: Giga Ethernet Control Instruction Transfer: Giga Ethernet Calibration mode: Offset calibration, Gain calibration, bad pixel calibration</p>
<p>Image Acquisition Workstation</p>	<p>Hardware Configuration: CPU: Intel Core 2 Duo≥2.6GHz Graphic Memory: 2GB Hard Disk: ≥320GB CD-ROM: DVD RW System Interfaces: USB, RS232, LPT, 100M network, DVI/VGA Monitor: 19" Monochrome Medical LCD resolution 1280×1024, Gray scale 1024 Operating system: Windows 7</p> <p>Software Configuration: InvaRay TX-DSI2000 Fluoroscopy Acquisition: 1024×1024, 30FPS Image Intensifier Acquisition: 9"/6"/4.5" Spot Film Acquisition: 1024×1024/7.5~1FPS, Speed Programmable Flat Panel Detector Acquisition: 17" ×17" Radiography Acquisition: 3028 × 3028 with APR</p>

	<p>WDM's Unique Features: Image Intensifier + Flat Panel Detector</p> <p>During gastrointestinal barium examination, could support Image Intensifier do fluoroscopy and use FPD to acquire image with 3k x 3k high resolution.</p> <p>Image measurement: Image calibration, Length/Square/Angle measurement</p> <p>Image Analysis: Histogram</p> <p>Annotation: Arrow annotation, Text annotation, Measure annotation</p> <p>Image Playback:</p> <ul style="list-style-type: none">Continuous or single frame reviewReal-time playbackMouse roller controlled playbackRoaming and Zooming <p>Send image to reference display</p> <p>Image Storage: Real time storage</p> <p>Important data locking protection</p> <p>Data Management</p> <ul style="list-style-type: none">Management of Disk space and image quantityPatient data index and advanced searchImage remarks, Sequence remarksAuthority management <p>Image Print and CD/DVD Burning</p> <ul style="list-style-type: none">Windows compatible Image (AVI/BMP/JPG/DICOM) OutputMultiple printer support (DICOM compatible)Multiple film size, division and arrangement settingsPrint PreviewDICOM compressed/uncompressed image burningWindows compatible image burningCD/DVD burning with DCM image browser <p>Fully Support All DICOM Function</p>
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● **Optional Components**

Part Name	System Description
FPD Detector	<p>Part number: FDX 4343R - Toshiba</p> <p>Receptor Type: a-Si / csl</p> <p>Size: 512mm×495mm×43mm</p> <p>Effective size: 430mm×439mm</p> <p>Pixel Matrix: 3008(h)×3072(v), Pixel size: 143um</p> <p>A/D converter: 14bit</p> <p>Spatial Resolution: 3.7lp/mm,</p> <p>Image construction time: 6s</p> <p>Ambient Temperature: -15℃ ~ 55℃</p> <p>DQE: ≥70%, MTF: ≥36%</p> <p>Weight: 7.5kg</p> <p>Data Transfer: Giga Ethernet</p> <p>Control Instruction Transfer: Giga Ethernet</p> <p>Calibration mode: Offset calibration, Gain calibration, error pixel calibration</p>
Rotating pedal	<p>Part No.: F199.23A</p> <p>Remote-control direction of rotation</p>
Table-side operating system	<p>Part No.: F832D</p> <p>19" Monochrome Medical LCD</p> <p>Resolution 1280×1024, Gray scale 1024</p> <p>Configuration: LCD, DVI signal line, Dolly, Foot Switch, Wiring board</p>
WD-Report Diagnostic Workstation	<p>WD-REPORT Diagnostic Workstation</p> <p>Hardware Configuration:</p> <p>CPU: Intel Core 2 Duo (Core 2 duo) ≥2.6GHz</p> <p>Memory: 2GB; Hard Disk: ≥320GB; CD-ROM: DVD Burning</p> <p>System Interface: USB, Standard RS232, LPT, 100MB network Interface, DVI/VGA Display Output Interface</p> <p>Keyboard: USB 104 Standard Black Keyboard</p> <p>Mouse: USB Mouse</p> <p>Monitor: 20" Color LCD Monitor</p> <p>Resolution: 1600×900</p> <p>Optional: 19" Mono Medical LCD Monitor</p> <p>Resolution: 1280×1024 Grayscale: 1024</p>

	<p>OS: Windows 7</p> <p>Software Configuration WD-REPORT</p> <p>Image processing: Window width/ level, Auto window width/ level setting, preview, preset Window width/ level, positive and negative image reversal; Image flipping, rotating, zooming, roaming; Image interpolation edge enhancement, restore original image annotation, Character/ number annotation, image annotation, Tape measurement, area measurement, auto-sub-setting</p> <p>Image Printing: DICOM Printing, Paper Printing, Manually Select Images Displayed for Printing, One-key Printing of Annotated Images, various printing equipment compatible, Printing in film format, Number of printing, Print Queue Control, Stop/ Start Presetting.</p> <p>Graphic Report: A diagnostic report can be written directly, with the addition of an imported positive image, and be printed on paper.</p> <p>Report Template: Medical Imaging description templates in common use are provided. The description template can be used and saved.</p>
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