High Frequency Mobile Digital FPD C-arm System

CCX18W wireless

Technical Specification

Package: 2500*1200*1480mm, total 4.5m³, Gross weight: 650kg, Net Weight: 500kg

I. Application:

Emergency Department, General Surgery, Spine Surgery, Orthopedics, Urology, Gynecology,Trauma, Pain Managerment, Plastic Surgery, Operating Room etc.

II. Configuration:

1	C-arm new design main frame, single power 220V+/-10% input ,easy to use	1 set
2	Combined high-frequency high-voltage X-ray generator monoblock (5.0kW, 110 kHz,40-120kV)	1 set
3	19 inch 1M LCD	2 set
4	9*9 inch Dynamic flat panel detector	1 set
5	Digital acquisition and processing workstation	1 set
6	Imported dense grain grid	1 set
7	Electric adjustable beam limiter (multi-layer electric variable rectangular lead door)	1 set
8	handheld controller	1 set
9	Red light cross positioner	2 sets
10	Unique hand-held controller	1 set

III.Advantages:

Larger field of view

Direct digital imaging effectively avoids the loss of information, edge-to-edge images, avoiding geometric distortion

smart FPD

- Intraoperative large field of vision
- (effective field of view increased by 22%)
- Image without distortion
- (Improve surgical reliability)

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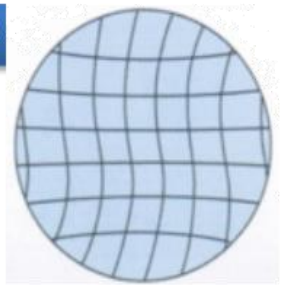
image intensifier

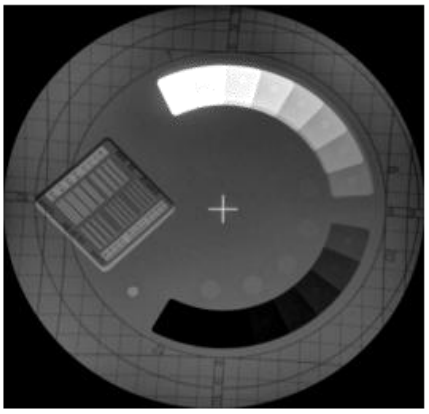


- Small field of view,
- Less effective information
- The image is round
- Edge deformity

Higher pixel range, wider dynamic range

image intensifier

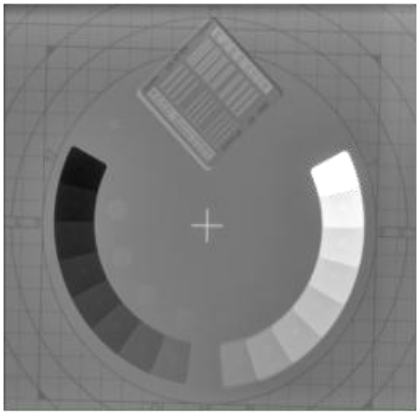
- Output grayscale 12bit
- Wire pair resolution 1.8LP/mm
- Only 1 million pixels



VS

dynamic FPD

- Output grayscale 16bit (16 grayscale depth)
- Limit resolution 3.2LP/mm (high density resolution)
- Nearly two million pixels



Intelligent image processing system

1、Image processing software : RCDPS (Rapid dynamic image processing system) multi-resolution image enhancement processing technology, meet clients vairety requirements

2、Precise processing technology: different precise processing for specific parts

3、Intelligent variable- frequency technology to ensure lower dose and sharper image

Low Dose, Ultra-Definition Image

IV,Technical specification:

Category	Items	Content
Generator	Power output High frequency inverter	Power output: 5.0kW Main inverter frequency: 110 kHz
	Automatic fluoroscopy	tube voltage 40 kv~120kv,adjust automatically tube current : 0.3mA~~4mA adjust automatically
	Manual fluoroscopy	tube voltage 40 kv~120kv, continuous tube current : 0.3mA~~4mA continuous
	Pulse fluoroscopy	tube voltage 40 kv~120kv, continuous tube current : 0.3mA~~30mA continuous
	Photography tube voltage, mA	40KV~120KV, 25mA~100mA, 1.0mAs~280mAs
Perlove X-ray tube	X-ray tube special for high	Dual focus:0.6/1.8mm

	frequency	thermal capacity: 650KJ (867kHu)
Imaging system	Detector	Perlove 9*9 inch Dynamic flat panel detector
		Amorphous silicon cesium iodide
		Image acquisition matrix: 1024*1024
		Gray scale of image acquisition: 16bit
		Pixel size:205μm
		DQE:74%
		Spatial resolution:2.5LP/mm
	Monitor	19" medical LCD monochrome display *3 sets
	Workstation software	Image W/L adjust, grayscale conversion, interest area balance, turn, noise reduction, enhancement, smoothing, sharpening, compression, zoom, measure, mark, print layout, Dicom image sending, Dicom image print and movie playback, etc.
	Imaging system	Equipped with proprietary intellectual property rights---"Vinci" image processing system: RCDPS --- rapid calculate display platform GPU --- based dynamic real-time image processing technology and automatic brightness tracking makes it easy to get sharp image of various body parts and meet the diverse needs of customers.
Structure and performance	Direction wheel and main wheel	Direction wheel can rotate in any direction, and main wheel can rotate in ±90°.
	C-arm movement	The up and down(motorized): 400mm. Forward and backward movement: 200mm; Revolution around horizontal axis : ±180°; Revolution around vertical axis: ±15°, Distance from focus to screen: 1000 mm; C-arm open distance: 800mm C-arm arc depth: 660mm; Slipping on orbit : 135°

V. WIFI Features:

1.Wifi Free workstation , more flexible ,higher efficiency

Full digitalization Wifi & wireless Transferring system, High flux, Real-in-time High speed Data transmission

Remote transmission, signal stable.

2.Super stability

Real-in-time imaging acquisitation and Super-stability of imaging.

3.No trouble

Free from the troubles & influence of broken cables and related repair

4.Wireless

Wireless design of the connection C-arm and workstation, free movement and more fast and convenient.

No need for extra assistance & One single doctors can finish the movement of the C-arm and workstation. Decrease the quantity of operaters and workload.

5.No loss

High Definition Excellent image

The latest dynamic flat panel detector

6.No distortion:

A-Si flat panel detector, full digital imaging chain, distortionless imaging

7.Larger view:

Large-size flat panel detector for various clinical examinations

8.Higher Definition

Higher DQE, low noise, exquisite image

9.Large dynamic range:

Large dynamic range, high gray scale, low dose, great imaging performance

Equipped with proprietary intellectual property rights---"Vinci" image processing system:

10.RCDPS --- rapid calculate display platform

GPU --- based dynamic real-time image processing technology and automatic brightness tracking makes it easy to get sharp image of various body parts and meet the diverse needs of customers.

11.Seamless connection Remote maintenance

DICOM 3.0 international standard interface, seamless connection with cloud PACS system for information sharing and remote diagnosing.

Self-diagnosis with error-code displaying and remote maintenance make it easy for repair

12.Barrier-free design

Easy to operate, more intimate

Bass movement

Bass operation, smooth motion

The rack is small and flexible, the thrust is light, the turning radius is small, and the climbing ability is strong.

Female medical staff can easily grasp, free movement inside and outside the operation room

Unique balance

Unique balance design for true balance

The C arm has a safety lock at any position, maintaining a reverse balance and operating freely.

Remote control

Parameter handheld controller design, can control the device away from the host, adjust parameters as desired

Two-way positioning

The tube and flat panel detectors are equipped with a two-way red light cross positioning system to help doctors efficiently locate during surgery

Intelligent dose

Intelligent human body graphic LCD touch screen

Different image processing methods according to different parts

Different doses of different parts, different doses and different frequencies

Intelligent frequency conversion reduces dose and pursues excellent image

Silent indication

Color motion control handle logo for quick and accurate communication between medical staff

Early warning, exposure, failure, configuration of different light tips

360° no dead angle to observe the working state of the machine

Worry-free radiation, ensure health, more reassuring

Intelligent frequency variation pulse fluoroscopy technology

Self designed high frequency high voltage generator becomes the Chinese leading intelligent frequency variation technology with low dose pulse fluoroscopy, which immensely improve the image quality while decrease by 50%-80% radiation dose and secure the safety during clinic work

Intelligent low-dose mode

High-quality image chain, with intelligent frequency variation low-dose working mode, according to different parts of the human body, adopt different image processing methods, different doses to different parts, different doses with different frequencies. Ensure excellent image quality while secure the operation with lower radiation.

Effective protection from compartment exposure

Wireless workstation, compartment exposure, effectively reduce radiation and protect the health of medical staff