

HighFrequencyAll-In-OneMobileDigitalFPDC-  
armSystem

# PLXC2119B-1



# Part 1. Company Introduction

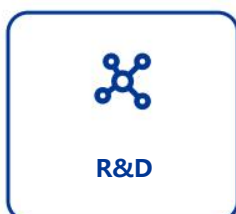
## ➤ Company Profile



Ever since Perlove Medical was founded in 2003, the company has been a high-tech enterprise integrating the research, production, sales and service of medical imaging equipment and orthopedic surgery robots. Although the concerns of these activities are different, one thing remains the same: Perlove Medical is customer demand-oriented and has always demonstrated a strong commitment to society with qualified products and services. As a high-tech enterprise, Perlove Medical firmly engages in self-research and technological innovation to make products meet clinical demands and continuously promote medical technology. All this is to help improve global healthcare and reduce medical costs. Located in Nanjing, China, Perlove Medical's products are serving clients in over 100 countries and districts across the globe.

## ➤ Company Strength


- **More than 200 patents of R&D**
- **20 years of technology accumulation**
- **Quality control system**
- **Worldwide service network**



## Part 2. Product Description

Perlove Medical integrated advanced technology and launched the all-in-one mobile digital FPD C-arm PLXC 2119B-1, and the image chain components are fully upgraded, bringing a wider field of view and clearer images.

### 2.1 Clinical Application

	<p><b>Orthopedics, General Surgery</b></p> <p>It provides clear images for orthopedic surgery and improves surgical efficiency and safety when dealing with common orthopedic operations such as osteotomies, reduction and screw implanting.</p>
	<p><b>Traumatology</b></p> <p>Dealing with complex surgeries, clear images can help surgeons to accurately implant screws, improve the success rate of surgery and reduce the probability of post-operative complications.</p>
	<p><b>Spine and Joint Surgery</b></p> <p>It can be applied to percutaneous vertebro plasty, joint replacement and anatomical reduction of elbow, hip and knee joints. It helps the surgeon to accurately place the prosthesis, shorten the operation time and improve the efficiency of the operation.</p>
	<p><b>Obstetrics and Gynecology, Pain Department</b></p> <p>It can assist doctors to complete fallopian tube recanalization surgery, with the ozone machine to treat pain, etc.; compact frame, lightweight movement, and simple operation of PLX119C, greatly improve the clinical operation experience.</p>



## 2.2 High-quality Digital Image Chain

### ➤ Large upgraded dynamic FPD

- ✧ A 30cm\*30cm large dynamic FPD, which increases the imaging area by 100% compared with the conventional image intensifier, bringing doctors a broader field of view;
- ✧ Superior imaging performance, with higher spatial resolution and signal-to-noise ratio, bringing doctors clearer images.

### ➤ Ultra-high-sensitivity touchable monitor

- ✧ Touchable screen, more fluid human-computer interaction.
- ✧ 27-inch large size display, larger field of view, easy to observe more anatomical details.
- ✧ A built-in DICOM medical curve, which accurately identifies the density changes of subtle tissues and presents images without loss.
- ✧ Multi-purpose touchable monitor with dual screen interface gives clear and delicate images for better examination can observe front and side images at the same time, which is convenient for comparative observation and brings more comprehensive clinical information.
- ✧ Fast and stable image generation in 1 second.
- ✧ Intelligent real-time image processing technology, saving time.

### ➤ Real-time touchable graphical user interface

- ✧ 11.6" multi-functional touchable graphical user interface (GUI) with large icon size, highly sensitive, precise touch control and easy operation.
- ✧ A variety of functions, easy exposure parameter adjustment and image post-processing, more convenient for near-stage operation.
- ✧ A large rotation angle ( $\pm 180^\circ$ ) to meet the needs of multi-directional observation.



Large upgraded dynamic  
flat panel detector



Ultra-high-sensitivity  
touchable monitor

Real-time touchable GUI

## 2.3 All-in-one Compact Design

### ➤ Easy and flexible movement

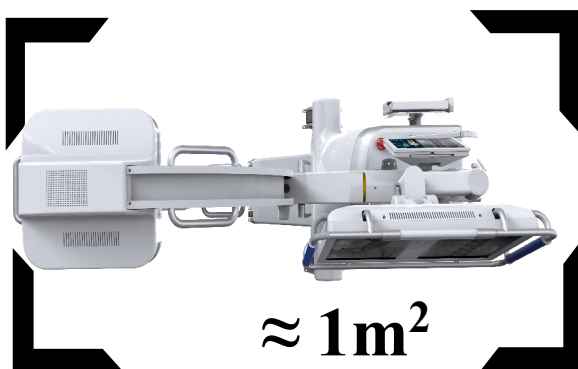
- ✧ No monitor cart and wires.
- ✧ Avoid safety hazards and costly maintenance caused by cluttered cables.
- ✧ More convenient near-table operation(Exposure parameter adjustment, image post-processing, etc.).

### ➤ Small footprint

- ✧ Only occupy about 1m<sup>2</sup>.
- ✧ Save operating room space.

### ➤ Instant surgery share

- ✧ Equipped with **10-minute standby power**. When the power is cut off, the machine is able to remain activated and transferred to another OR without data loss or delays.
- ✧ As soon as it is reconnected to the AC, the machine will immediately operate normally.
- ✧ Combined with the all-in-one compact design, it can realize fast transfer to other operating rooms and quickly carry out another surgery, greatly improving work efficiency and easily dealing with various emergencies.



## 2.4 Convenient and Easy Operation

### ➤ **Articulated monitor stand**

The stand supports the monitor to turn freely to make the doctor observe images from all directions and angles.

Safety limit and anti-collision device are set, keeping safe.

### ➤ **Push-button switch**

One button is pushed to turn on/off the machine, which simplifies overall workflow, saves preparation time and rapidly work in the face of emergencies.

### ➤ **Bidirectional positioning**

Laser positioning systems are added at the two ends of the tube and the flat panel detector to meet the demand for rapid positioning, precisely positioning the examination site and improving clinical efficiency.

### ➤ **Human-like GUI**

Fast parameter setting. You can quickly select the corresponding exposure part in GUI, based on intelligent recommendation of the best exposure parameters, with automatic dose adjustment in automatic fluoroscopy mode, not only to improve efficiency but also ensuring the image quality.

### ➤ **Multi-dimensional motion control**

The motion control of the equipment enables vertical motion, horizontal motion, orbital rotation, and rotary motion along the horizontal axis, which can be adapted to different surgical tables and make it more convenient for surgeons to carry out surgeries.



**Articulated monitor stand**



**Human-like graphical user interface**

## 2.5 Product Parameters

<i>Items</i>	<i>Content</i>
<b>Electrical performance</b>	
High frequency inverter power	Power:5.0kW Main inverter frequency: 110 kHz
Automatic fluoroscopy	tube voltage 40 kv~120kv, tube current : 0.3mA~~4mA
Manual fluoroscopy	tube voltage 40 kv~120kv, tube current : 0.3mA~~4mA
Pulse fluoroscopy	tube voltage 40 kv~120kv, tube current : 0.3mA~~30mA ; 0.5p / s to 30p / s
Photography tube voltage, mA	40KV~120KV, 1.0mAs~280mAs
<b>X-ray tube</b>	
Dual focus:	0.6 / 1.2
Thermal capacity:	650kJ (867kHu)
Anode heat capacity	53kJ (74kHu)
<b>Imaging system</b>	
Detector	Imported 12*12 inch (30*30cm) Dynamic flat panel detector
	Type of detector: CsI
	Pixel matrix: 2048*2048
	Pixel size: 150µm max
	Acquisition depth :16-bit
Monitor	27inch 1 M medical LCD grayscale display
	<ul style="list-style-type: none"> <li>• Maximum brightness 850 cd / m2 minimum</li> <li>• Contrast ratio 800: 1 minimum</li> </ul>
Mega-pixel CCU	Real-time acquisition, continuous adjustable recursion, many images storage, up and down image, left and right image, image patching, LIH (last image freeze)
Workstation software	Storage capacity 25,000 standard images. Image W/L adjust, grayscale conversion, interest area balance, turn, noise reduction, enhancement, smoothing, sharpening, compression, zoom, measure, mark, print layout, Dicom for sending images to the PACS, Dicom image print, etc. USB port for image export
<b>Structure&amp;performance</b>	
Direction wheel and main wheel	Direction wheel can rotate in any direction, main wheel rotate in $\pm 90^\circ$ .
C-arm(Brake for all movements)	The up and down electrical stroke of pillar is 40CM
	.Forward and backward movement:20Cm;
	Revolution around horizontal axis: $\pm 180^\circ$ ;
	Revolution around vertical axis(Pivot): $\pm 15^\circ$ ;
	Distance from focus to screen: 100cm;
	C-arm open distance: 80cm
	C-arm arc depth: 66cm;
	Slipping on orbit : $135^\circ(+ 90^\circ -40^\circ)$

## Part 3. Service

Move forward steadily, keep improving



Professional service team for pre-sales, in-sales and after-sales



More than 100 overseas local engineers in 60 countries



More than 100 Chinese after-sales engineers serve the world



Cooperate with professional sea, air and land logistics to ensure safe delivery

After-sales Service Centers All Over the World



Reply within 24 hours



Sufficient accessories, quick solutions



7/24 hours remote after-sales service



Barrier-free communication in English



Qualified training and issuance of operation certificate



Since Perlove Medical's establishment for 20 years, it has provided high-quality products and services to **nearly 10000 customers around the world!**