

ULTRA VISION 500

SYSTEM DIAGNOSTIC X RAY



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TECHNICAL SPECIFICATIONS

STATIONARY DYNAMIC X-RAY SYSTEM

High-frequency digital X-ray system with digital radiography and fluoroscopy capabilities.

X-rays of different parts of the body: such as the head, chest, abdomen, waist, lumbar spine, thoracic spine, pelvis, and extremities, etc. It also allows for X-rays to be taken in different positions, such as supine (lying down), upright (standing), and lateral (sideways).

Improved diagnostics for orthopedics and traumatology, such as:

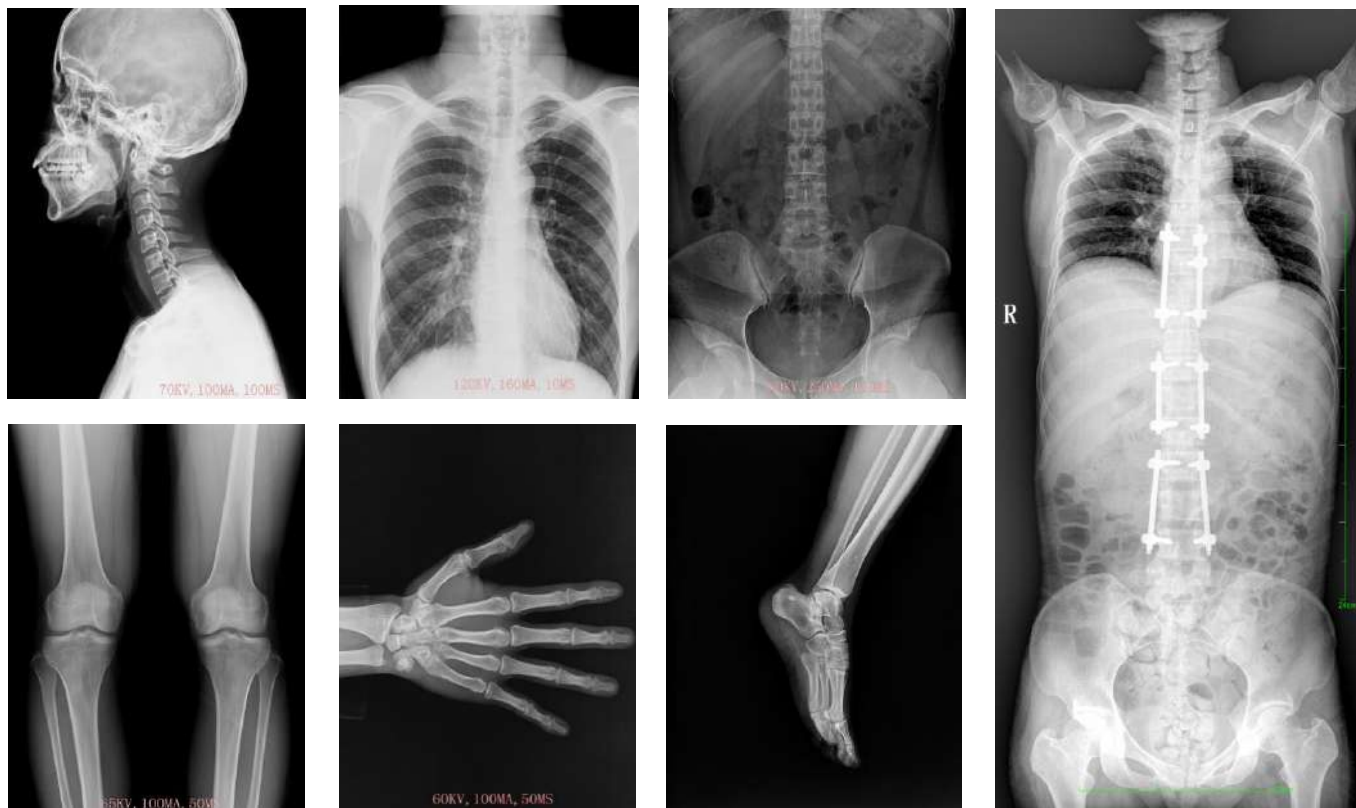
- Visualize the dynamic relationship between bones and soft tissues.
- Examine joints and structures both at rest and in motion.
- Analyze biomechanics and musculoskeletal injuries (e.g., whiplash).
- Perform examinations in weight-bearing positions (standing or bearing weight).
- Assess postoperative movement (knee, wrist, spinal fusion, etc.).
- Monitor treatment progress.
- Postoperative evaluation.

Improved diagnostic capabilities for the Pulmonology and Neurosurgery departments, such as:

- Determine the causes of dyspnea (difficulty breathing).
- Dynamically evaluate bronchiectasis and pulmonary hypertension.
- Differentiate between restrictive and obstructive lung disease.
- Observe the interactions between the lungs, muscles, bones, heart, and nerves.
- Analyze diaphragmatic movement, respiratory effort, and other parameters.

Contrast-enhanced examinations: Such as gastrointestinal (GI) imaging for the diagnosis of gastroesophageal reflux, or for the diagnosis of gynecological conditions, such as pelvic inflammation and adnexitis.

LOW-DOSE, ULTRA-HIGH-DEFINITION IMAGE



Equipment Movements

STATIONARY DYNAMIC X-RAY SYSTEM



Vertical movement of the tube



Tube holder mounted on a floor rail



Floating motion using pedals



Table height adjustment using pedals



Tube Rotation

MOVEMENTS OF THE TABLE AND THE TUBE

Motorized height adjustment	50cm~72cm
Longitudinal movement of the tube support	2500mm
Longitudinal displacement of the deck:	+/-50cm (100cm)
Transverse table travel:	+/-13cm (26cm)
Table dimensions: (length × width × height)	2250 x 810 mm (+/-50mm)
Column with swivel joint:	-180° ~ +180°
Vertical path of the tube within the column:	130cm
Minimum distance from the floor to center of the X-ray:	350mm
Pipe rotation angle:	-180° ~ +180°
Heavy-duty construction with minimal load:	200 kg
Grate	18"x18", 103LP, 10:1, distance SID: 1.0m

Wall-Mounted Bucky (XPJ20C) - Manual and Motorized

Vertical height displacement:	150 cm
Minimum distance from the floor to the center of the bucky:	350mm
Grate	18"x18", 230LP, 10:1, distance SID: 1.8m

Product Specifications

STATIONARY DYNAMIC X-RAY SYSTEM

1. Item	2. Content	3. Technical Specifications
Power	Three-phase power supply	380V±10%
	Frequency	50Hz/60Hz
	Capacity	105 kVA
High-Frequency, High-Voltage Generator	Output Power	65KW
	Inverter Frequency	500KHz
	Kvp Range	40kVp - 150kVp, 1 kVp increments
	Tube Current	10mA - 800mA
	Tiempo de exposición	1ms - 10000ms
	mAs Range	0.1-800mAs
	Maximum Voltage (Fluoroscopy)	125kV
	Maximum Current (Continuous Fluoroscopy)	20mA
	Maximum Current (Pulsed Fluoroscopy)	40mA
Automatic Collimator	Average brightness	100Lux
	Filter	> =1mmAL
CANON BRAND X-ray Tube	Model	E7252X
	Focus: large/small	1.2mm /0.6mm
	Focal power:	Small focus 27kW / Large focus 75kW
	Tube angle:	12°
	Anode heat capacity	400KHU (rotating anode)
	Heat dissipation from the anode	1226HU/s
	Tube capacity	1250KHU
	Filter	0.9mm AL/75KV
	Rotating anode speed	9700rpm
	Operating voltage	40-150KV
Dynamic Flat- Panel Detector	Materials	A-Si (Amorphous Silicon) - CSI
	Active area	17"x17" (43cm x 43cm)
	Pixel matrix	3072(H)×3072(V)
	Pixel Pitch	139 micras
	Spatial resolution	3.7 LP/mm
	A/D Conversion	16 bits

Advantages

SYSTEM DIAGNOSTIC X RAY

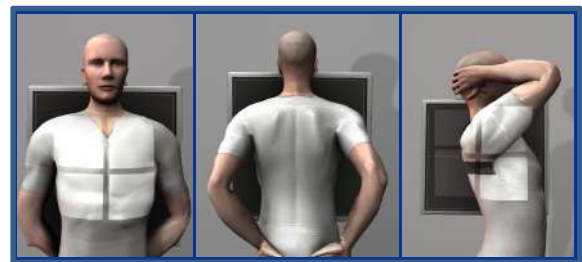
10.4-inch interactive color touchscreen control panel integrated into the X-ray tube.

The control screen displays the SID value, the X-ray tube angle, and the collimator aperture, and allows you to adjust the exposure parameters (kV, mA, ms), which are automatically synchronized with the generator.

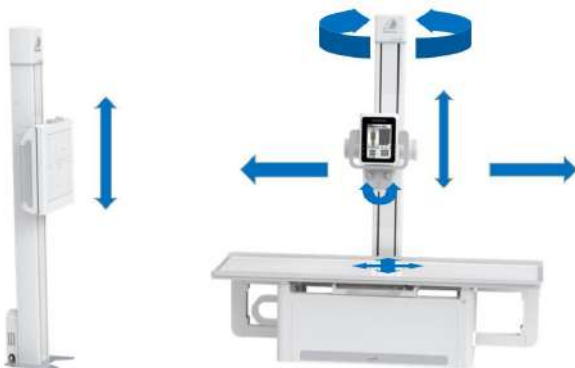
Ability to schedule emergency exams from the interactive screen, select the technique (body part and position), and choose the patient type



Control screen that automatically adjusts as the tube rotates



The screen features a visual guide for patient positioning with 3D illustrations



Tube holder and floating table with electromagnetic brakes



Motorized, floating, and manual movement with electromagnetic brakes on all components:

- Motorized vertical movement of the tube (up and down).
- Manual horizontal movement of the tube (left and right).
- Motorized vertical movement of the wall-mounted bucky for added convenience.
- 6-way floating table.
- Rotation of the tube around the column.
- Oscillation of the tube around its axis.

X-ray Tube Tracking:

Motorized automatic tracking function with both the wall-mounted bucky and the table-mounted bucky. This allows for expanded imaging without losing the center of the X-ray beam on the digital detectors.

Autostitching Software:

In conjunction with automatic tracking, the system allows for panoramic examinations using the wall-mounted bucky, with up to three exposures taken from the workstation. After each exposure is taken, the wall-mounted bucky and the X-ray tube automatically move to the next position, and the software combines these three exposures into a single panoramic image.

Workstation with software

STATIONARY DYNAMIC X-RAY SYSTEM

Technical specifications of the data acquisition

console: Processor: Intel Core i5

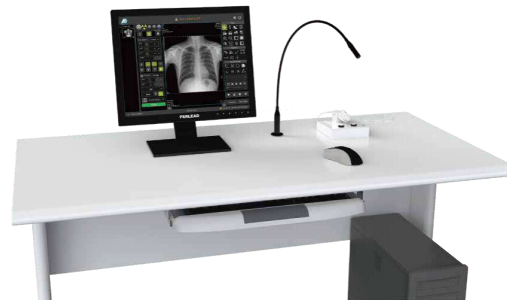
RAM: 8 GB

Hard drive: 1 TB

DVD +/- RW drive

21-inch medical-grade monitor

Operating system: Windows 10



Control screen for viewing the image captured, including a real-time fluoroscopy display, as well as generator control and patient management.

Integrated Control: From the workstation, you can control the vertical movement of the wall-mounted bucky or X-ray tube with tracking enabled; you can also control the opening and closing of the motorized collimator. Real-time display of the SID value and tube angulation ensures greater precision. The foot switch for fluoroscopy allows you to perform exams without leaving the workstation.

X-ray parameter settings: Exposure mode, frame rate settings, kVp, mA, ms, mAs, AEC (automatic exposure control) function with 3 fields configurable via software on the workstation for the table and wall-mounted bucky, and a function for automatically selecting appropriate exposure parameters based on the anatomical region and the type of study to be performed.

Viewing tools: Zoom in/out, rotate up/down, rotate left/right, 90° rotation left/right, zoom in, zoom out, original size, move image, grayscale image inversion, adaptive sizing, general magnifier, noise reduction filter, contrast filters, adjustment of ROI or visible window width and level, gray value per pixel, advanced processing, ellipse-based gray value measurement.

Measurement tools: Distance, angle, rectangle, ellipse, arrow, cardiothoracic ratio (CTR), spine, distance measurement, angle measurement, dosimeter (DAP) to calculate the radiation level for each exposure.

System Tools: Text label and measurements, body label, left/right marker, circular crop, delete image, stitching function to combine multiple X-ray images into a single panoramic image.

Permanent DICOM 3.0 Licenses: Protocols for handling, database management, visualization, storage, and transmission—such as DICOM Print, DICOM Storage, and DICOM Query/Retrieve—for images, worklists, and reports integrated into the workstation.



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