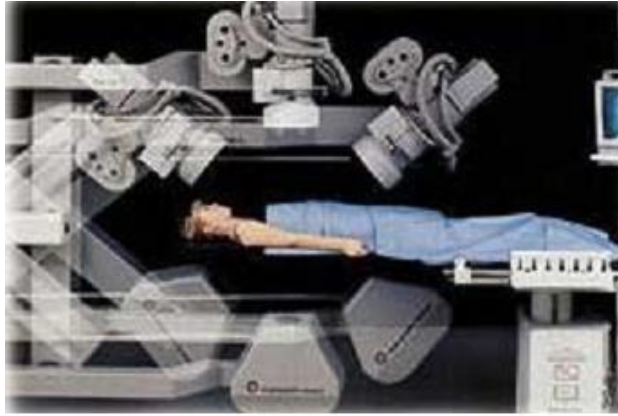


ADC Digital Single Plane Cardiac Imaging System



Typical Manufacturer's Picture

ADC Digital SP single-plane cardiovascular digital angiography unit features a high-resolution fluoroscopy tube, an advanced image intensifier with full-frame zoom, and an image analysis workstation for improved patient outcome.

Parallelogram Stand Provides:

- 55 degrees of Cranial and Caudal angulation and +/- 120 degrees of rotational motion
- Rotational pivot allows U-arm to be routed +/- 45 degrees away from table
- Table centerline to allow clear access to patient
- Motorized control from table for :
- RAO / LAO Angulation movement
- CRAN / CAUD movement
- SID motion
- Speed stand movement of 10 degrees or 20 degrees per second rotation and 7 or 15 degrees Cranial /Caudal

Includes:

- X-ray tube cooler for high case load and rapid turnover
- Poly C X-ray tube cover box
- Digital position display

Constant potential Generator of 90KW Provides:

- Constant potential design with standard pulse fluoroscopy



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- 7.5/15/30/60 frames per second recording
- 7.5/15/30 pulse fluoroscopy rates with active cable discharge
- Solid state pulsing for use with digital imaging
- Solid state pulsing system employs high voltage field effect transistors
- Automatic control of the kV, mA, Focal spot and pulse width for optimum brightness and contrast during cine and electronic imaging
- No ripple in the Tube Voltage curve
- 200usec typical rise and fall times of tube voltage
- Pulsed fluoroscopy with the standard X-ray tube(No Grid)
- All the X-ray parameters (Kv, mA and time) are controlled and operated by intelligent software loops, assisted by a microprocessor
- Automatic X-ray tube calibration
- Interface to TRI focal X-ray tube to improve image resolution
- 0.5ms to 11ms (nominal 8ms) pulse width selection
- 1000mA output (90KW nominal load)
- 125 kV maximum
- Heat unit calculator with display on monitor for user observation

Includes:

- Power Rack
- Image Rack
- High tension tank

High Capacity Cardiac X-ray Tube and Collimator:

- Bi focal spot sizes of 0.6 and 1.0mm
- 1.5 Million Heat Unit Anode Storage Capacity
- Target Angle of 10 degrees
- Metal center section Technology
- Rapid dissipation Heat Exchanger for high case load
- Round and square field collimation
- Dual Wedge filters with inward and rotational movement
- Aluminum and copper filtration
- Collimator interface and control
- Image Intensifier:
- 9"-7"-5" Tri mode acquisition zoom with 25 mm output window
- Power supply and shield



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- 83mm, F 12 assembly
- Brightness pick up
- II Mount
- 9" carbon grid 110 line , 8:1 Ratio
- Ceiling monitor support & Three 20" monitors
- Ceiling carriage with Radial arm
- Ceiling mounted Monitor Suspension.
- Longitudinal rafts 8' 10"
- Longitudinal travel of 6'4"
- Monitor Tray with cushion
- Monitors arranged in horizontal array
- Pedestal Patient Table:
- 107" flat carbon fiber top rated at 350lbs.
- Vertical travel of 14"
- Four way float top for easy positioning
- Transverse travel of +/- 8 degrees
- Longitudinal travel of 60"
- Table top Rotation of 180 degrees
- Mushroom style panning Handle

Digital features:

- 2/3" FT18 High Performance sensor
- 12 bit A/D Converter in the camera Head
- Switchable binning on the fly
- 1024 x1024 pixels at 30 FPS (40 MHz)
- 1024 x 512 pixels at 60 FPS (40 MHz)
- Better than 60 dB signal to Noise
- 100% Optical Fill factor
- Typically 50 Kel Linear full well
- Minimum blooming
- LVDS connection from camera head
- Vertical and horizontal reversal at camera head
- Embedded timing and control
- Small package , approx. 5" square and 2" deep
- Switching power supply with current limiting and no fuses
- Automatic line voltage and frequency selection



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- On screen setup for all camera parameters and calibration
- Self and extended test functions
- 10 different programmable modes
- AGC and Manual gain control for each mode
- Auto or manual black and noise reduction
- Small and large sensing circle
- Peak or average sensing
- Full 30 or 60 FPS, Gamma table selection
- Last image hold
- VGA monitor output 1280x1024 progressive is a standard feature
- Direct to X-ray Generator interface
- 12 bit digital output for image processor
- Image processor control interface
- Automatic brightness control output
- Pixel correction , smear correction, dark current and black level compensation
- Interface for pulsed fluoroscopy and cine with adjustable exposure phasing
- Automatic programmable Iris control
- Analog inputs for the display of parameters within the video frame, such as LAO/RAO, CRA/CAUDU, ECG waveform etc.

Digital Workstation features:

Clinical application software package with boosted response times.

Includes:

- Forward /reverse
- View speed
- Run step
- Electronic shutters
- Brightness/contrast
- Edge enhancement
- Video invert
- Annotation
- Selection of images for transfer
- Flag/deflag exam
- Selection of physio signal



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- Pan-zoom
- Examination/ run overview
- Store/delete images to/from photo file
- Run cycle
- Examination cycle with variable speed
- Selection and execution of quantification software
- External Communication
- Digital subtraction angiography including segmented DSA
- Neuro roadmap for Neuro applications
- Progressive Online DSA

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