

On A **Global Mission** With A **Local Heart**

Speaking your language across 180 countries



TRIVITRON
H E A L T H C A R E
speaking your language

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 /Trivitronindia  /Trivitronindia  /company/trivitron-healthcare  /TrivitronHealthcare

TRIVITRON
H E A L T H C A R E
speaking your language

Bringing
LIFE TO LIGHT



About Trivitron Healthcare

By combining innovation with affordability and accessibility, we are a leading health technology enterprise that has been operating for more than two decades to improve health and medical care throughout the world, like no one else. We consider quality healthcare a fundamental right of people and envisage to make top-notch, cutting edge healthcare technology available for people of all classes.

We lay great emphasis on research and development. Our team includes internationally acclaimed experts and leading scientists who innovate unprecedented health technologies suitable for healthcare needs of today and tomorrow.

We provide technological advancements to hospitals, individual healthcare providers, independent clinics, extended care facilities and laboratories, catering to healthcare needs in multiple verticals like In-Vitro Diagnostics (IVD), Imaging & Radiology (In-vivo Diagnostics), Critical Care & OT Solutions, Newborn screening (NBS) and Radiation Protection Apparels (RPA).

Through a growing network of 1500+ employees, 1200+ channel partners and 15 world-class manufacturing units spread throughout the world, Trivitron Healthcare is reaffirming its commitment to offer superior health technologies in 180+ countries saving lives and improving care.

By simplifying and expanding our business, we are rapidly moving to establish ourselves as a global leader in health technology. We are committed to build a sustainable business that delivers value by offering best available health technology solutions for millions of people worldwide.

Newborn Screening

Medical Imaging

Renal Care

Intensive Care

In Vitro Diagnostics

Radiation Protection

Operating Room

Turnkey Solutions



15 Manufacturing and R&D Facilities in India, Finland & Turkey



100+ Years of Combined Manufacturing Experience



Presence in 180 Countries



Global Manufacturing Facilities

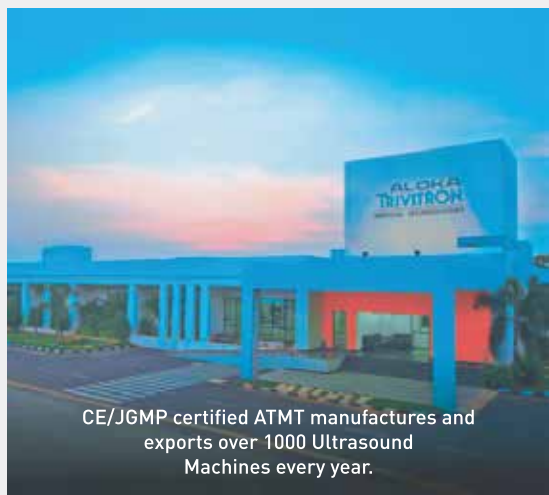
With 15 manufacturing facilities, Trivitron occupies an enviable position in the healthcare industry by producing a wide range of equipment, laboratory reagents, diagnostic kits and even protective apparel for radiology departments. the products are used in health care setups and hospitals across the world.



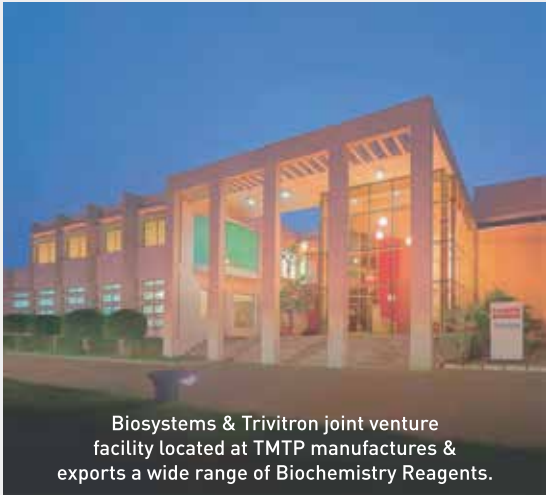
CE / US FDA certified Kiran Medical Systems at Mumbai facility manufactures and exports Radiology accessories, components & Radiation Protection Products.



AERB approved manufacturing facility at Kiran Mumbai & Pune manufactures and exports imaging products like X-Ray, C-Arm & Mammography to various countries.



CE/JGMP certified ATMT manufactures and exports over 1000 Ultrasound Machines every year.



Biosystems & Trivitron joint venture facility located at TMT manufactures & exports a wide range of Biochemistry Reagents.



Andhra Pradesh MedTech Zone Ltd
Ultra Modern Medical Equipment Manufacturing & Testing Facilities



CE Certified manufacturing facility in Chennai inaugurated by the Honorable Prime Minister of India, Shri. Narendra Modi and Prime Minister of Finland, Mr. Juha Sipilä manufactures and exports a wide range of IVD products.



LabSystems Diagnostics facility in Finland manufactures and exports CE certified Newborn Screening and Diagnostics kits for Gastro, Cardiac Panel and Infectious Diseases.



Bome Sanayi Urunleri Dis Tic A.S. at Turkey is involved in research and development of newborn screening tests, hematology solutions, clinical reagents and Quality Control Materials.



CE certified manufacturing facility exports products like ECG Machines, ICU Ventilators, Patient Monitors and Defibrillators.



CE certified Trivitron facility manufactures and exports Operating Room products like Ultraclean Modular OT, Pendants, Bed Head Units, etc.

Kiran & You!

A Story of Mutual Trust & Confidence

Kiran is one of the most respected global beands in the field of Radiology.

The Kiran Jpurney started in 1974 with our first set of customers who placed their complete trust and confidence in our Radiology products. At Kiran, we have continued to evolve and innovate with the hope of bringing the best technology to our valued customers. Over the past 4 decades, kiran has become one of the leading solution providers in Medical Imaging, catering to customers in 180 countries across the world.



Kiran is driven by 3 Cardinal Business Principles



Innovation



Quality



Customer Service

Modalities of Focus



Radiation Protection



Fixed Radiography



Mobile Radiography



Surgical C-Arm



Mammography



Ultrasound



Contrast Media



Imaging Accessories & Consumables

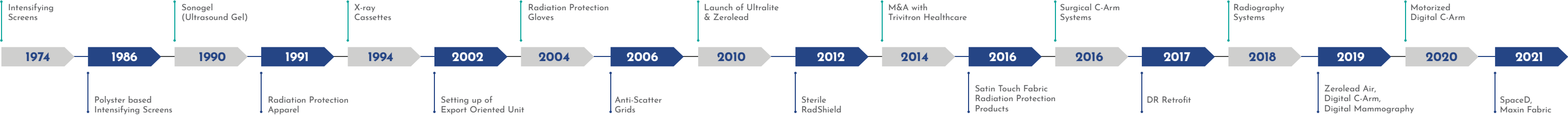
Kiran - committed to the field of Radiology catering to customers across 180 Countries



Manufacturing Facilities in Mumbai, Pune & Rasayani - India



The Journey So Far



CERTIFICATIONS

Compliance to International Quality Standards

Our quality systems are assessed and certified as per the guidelines of ISO 9001:2015 and ISO 13485:2016.

Our Products conform to the stringent quality norms of CE, as specified by European Council's Medical Device Directive (MDD) contained in 93 / 42 / EEC, as well as Regulation(MDD) 2017/745 & also PPE Regulation (EU) 2016/425 NB no 0598.

Most of our Radiation Protection Products meet or exceed EN 61331-1:2014, EN 61331-1:2014, IEC 61331-1:2014, ASTM 2547, EN 388:2016, EN 420:2003+A1:2009, DIN & IS Standards. Our manufacturing facilities are registered with USFDA.



Health
Canada



DIN EN
Deutsches Institut für Normung

ICMED

Kiran has been registered by Intertek as conforming to the requirements of ICMED 13485 (Indian Certification for Medical Devices Certification Scheme)

R&D Facility

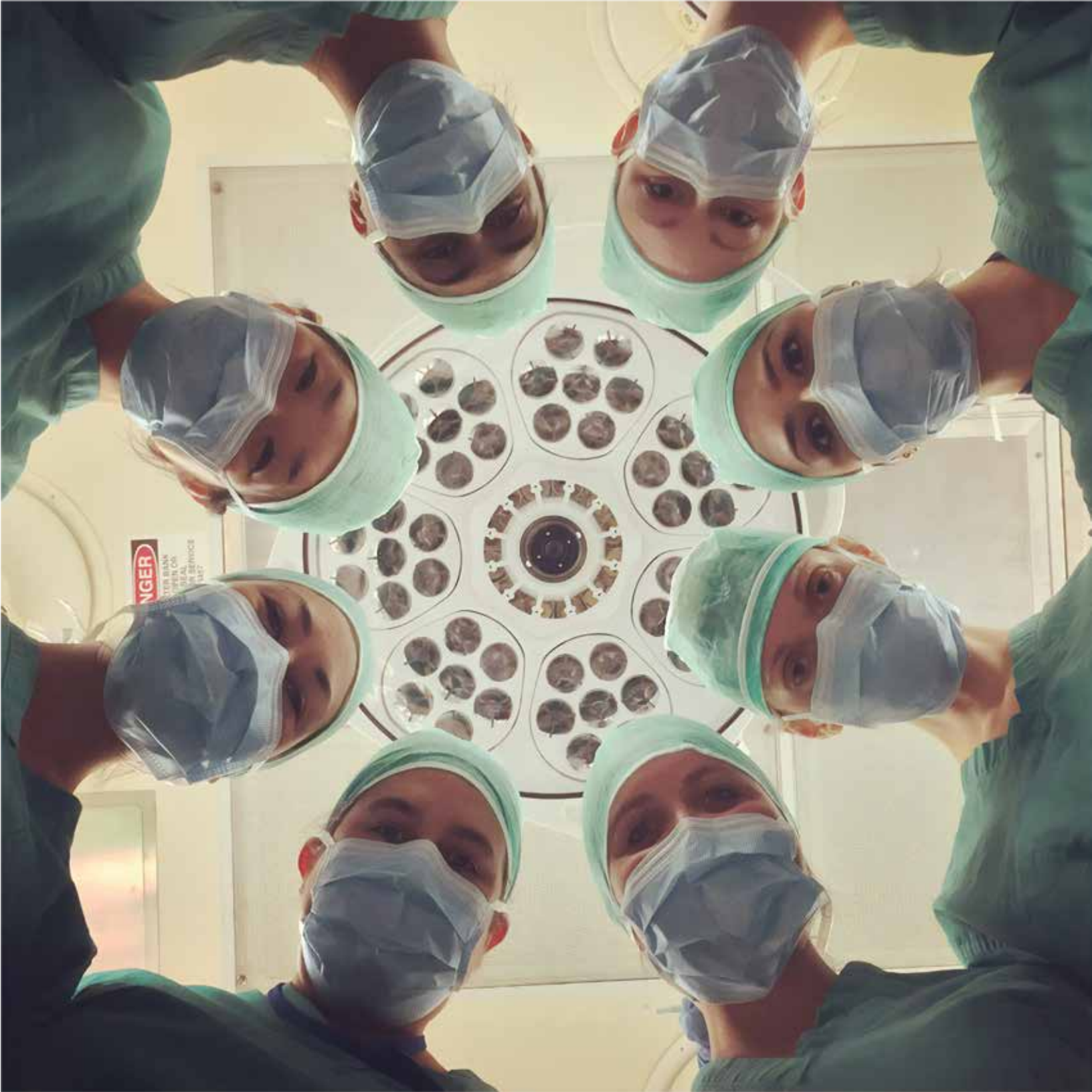
Kiran has its own R&D facility, approved by Department of Scientific and Industrial Research (DSIR), measuring 100 m² of Area.

Our Testing Facilities

Kiran has its own state-of-the-art Radiographic Testing Centre where we test our products during research and development as well as in-process quality control and final testing before release for sale.

CERTIFICATIONS





IMAGING SPECTRUM

Surgical Imaging Systems

12 - 27

Radiography Systems

28 - 43

Mammography Systems

44 - 55

Radiation Protection Products

56 - 83

Imaging Accessories & Components

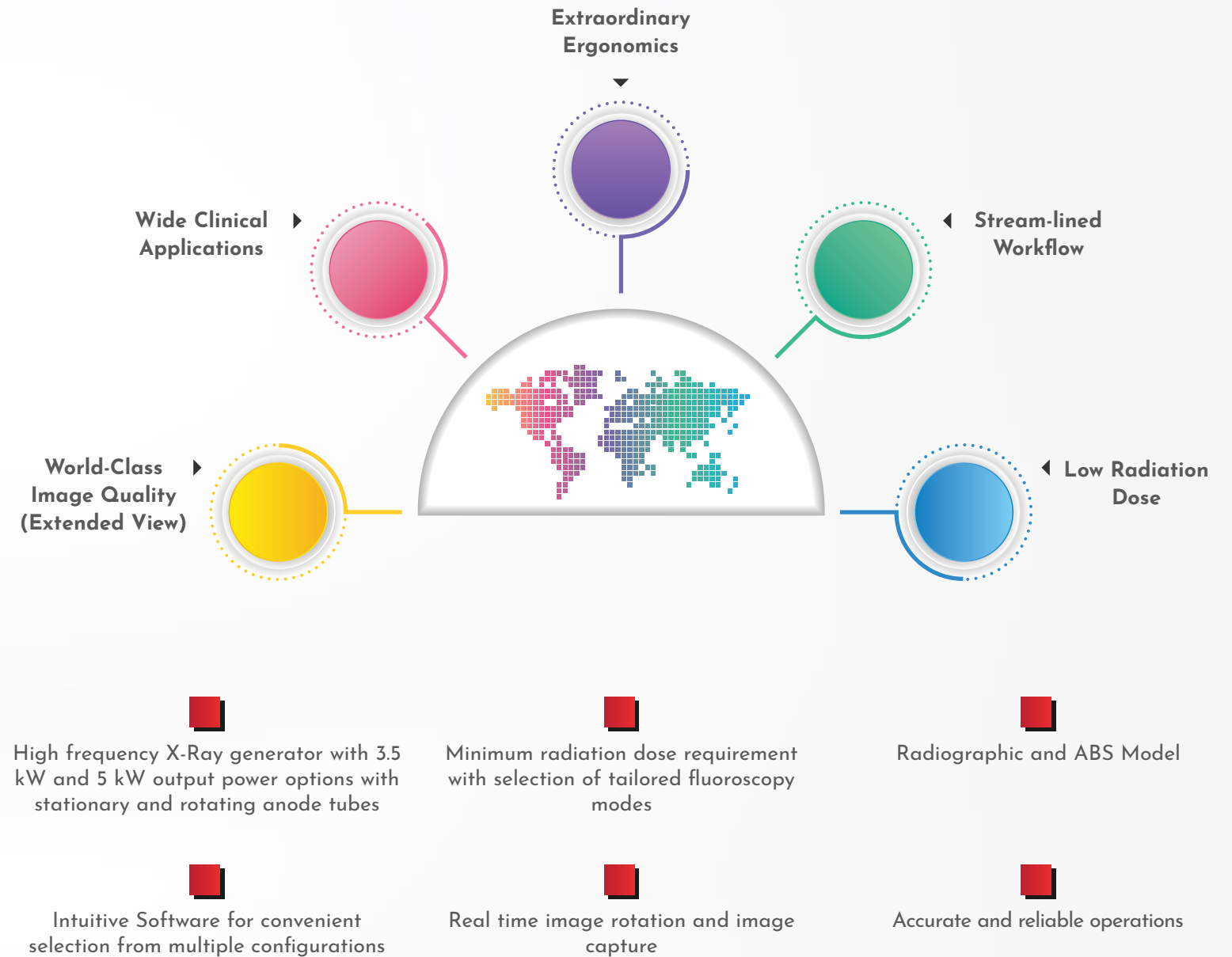
84 - 93



SURGICAL IMAGING SYSTEMS

Surgical C-Arm Systems

Our state-of-the-art C-Arm Systems use a Flat Panel Detector or High Quality Image Intensifier that provide high contrast images. Kiran C-Arm Systems provide mobility with a compact design with intuitive positioning. Accurate, Reliable & Durable.



Motorized Digital C-Arm Systems

Motorized series of Flat Panel based Digital C-Arm deliver sharp images and aids in Dose Control. With soft touch buttons on the equipment, surgeons and technicians can accurately position the C-Arm without stepping out of the sterile field and save time on providing instructions to the technicians. Equipped with "Smart Touch", an intelligent touch based user interface that helps in enhancing the complete workflow in the operation theatre by allowing the surgeon to have direct access to the acquired images and a handy selection tab menu.



FLAT PANEL

9 x 9 inch Flat Panel Detector that enables better acquisition with direct conversion to image with curtailed conversion process that results in lesser data loss

TOUCH CONTROL PANEL

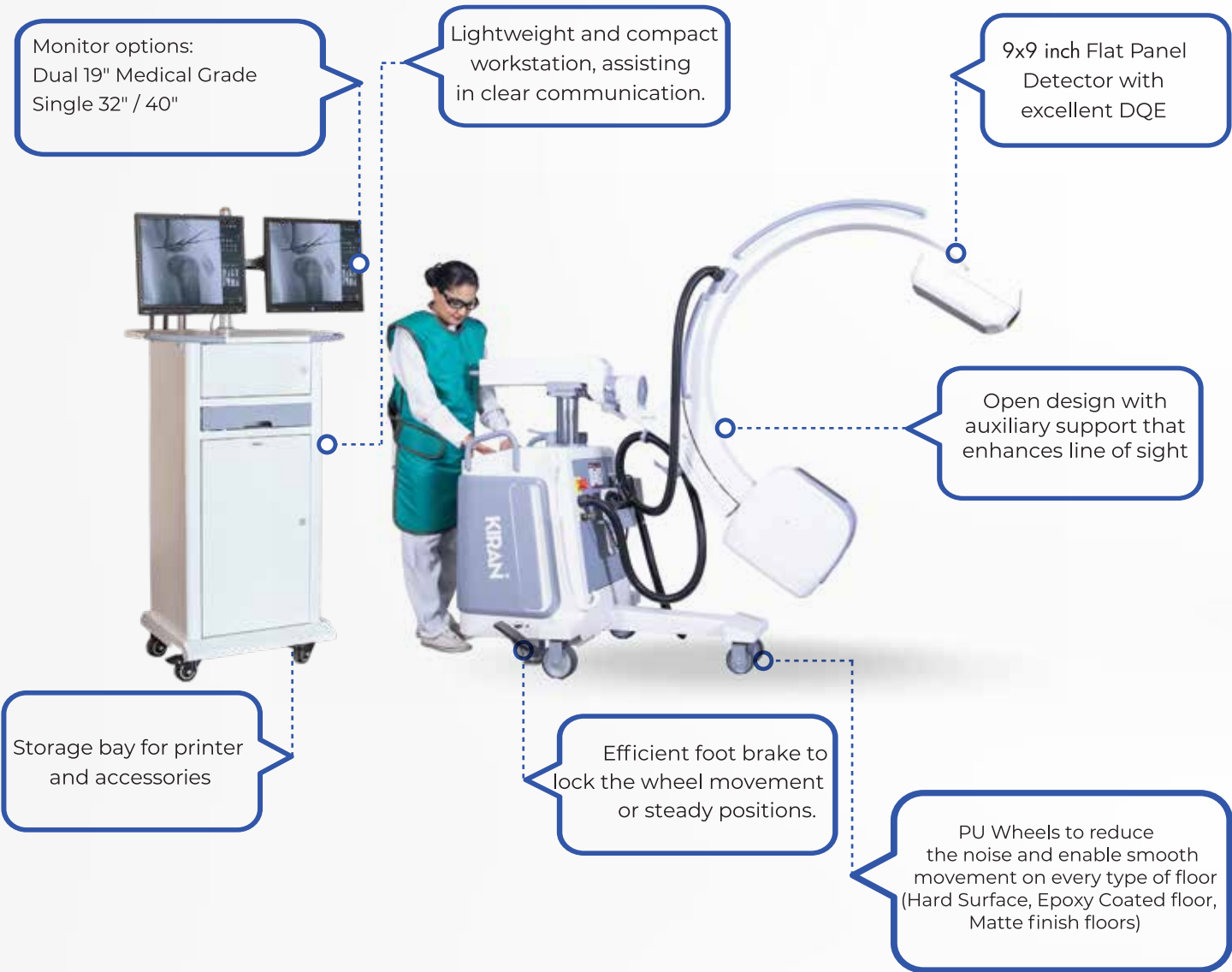
A smart remote user interface with a large touch screen display

MOTORIZED MOVEMENTS

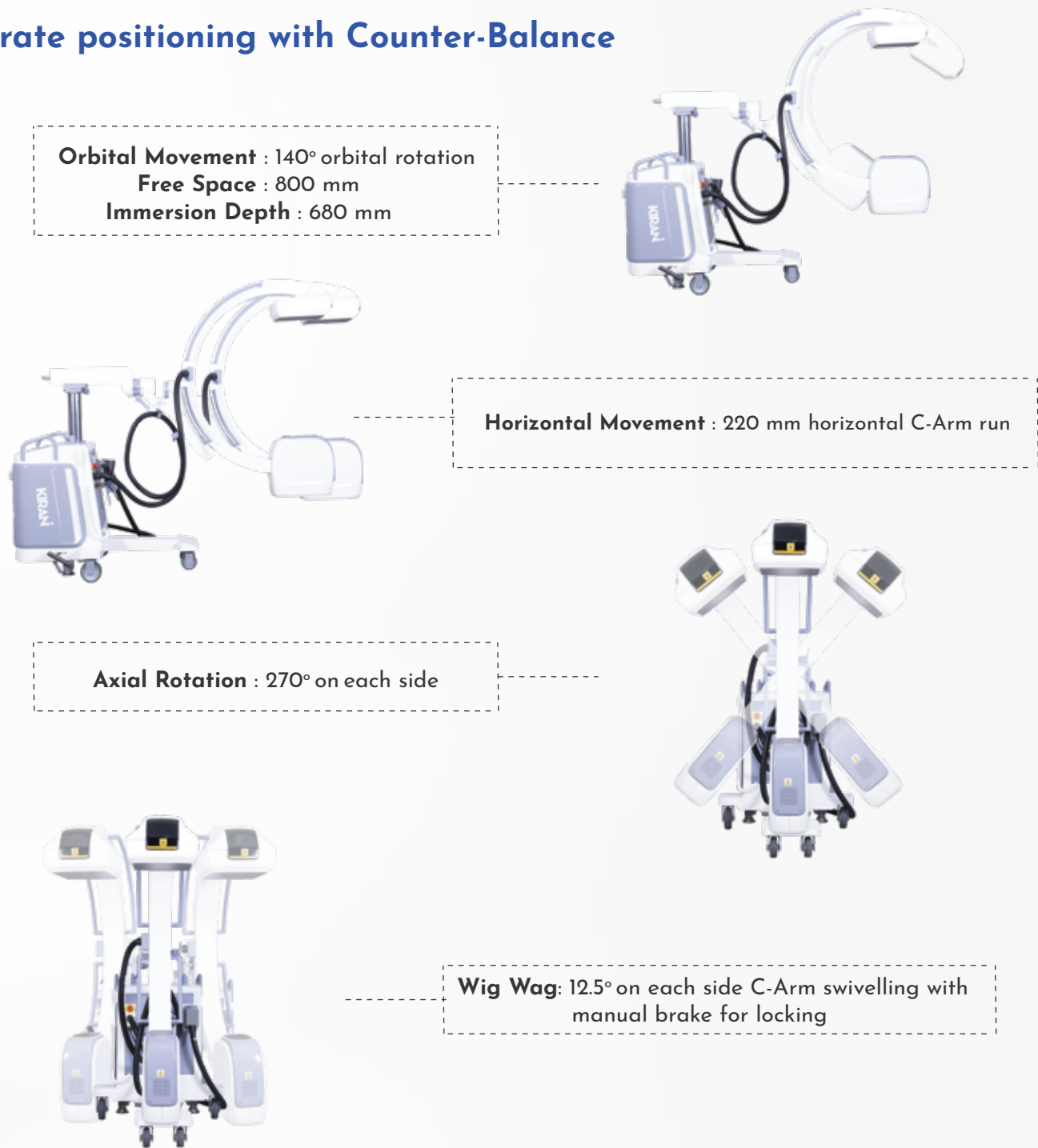
Easy touch buttons for effortless maneuverability and precise positioning.

EDGE TO EDGE

Uncompromised Image quality with Edge to Edge Visibility



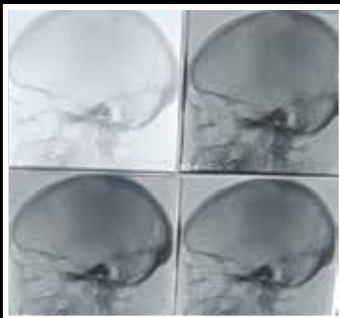
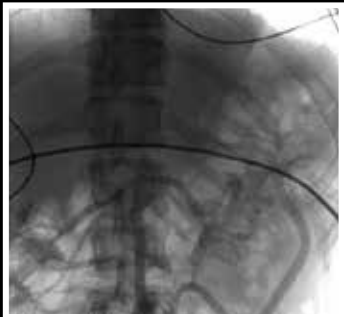
Accurate positioning with Counter-Balance



Wide Clinical Applications

- ✓ User Friendly Workstation Interface - Ease of use and faster workflow with ABS & ADRC mode, Semi Auto & Fully Auto mode
- ✓ Comprehensive Image Management - Real time image rotation and Real time image capture with recording of images as 'Last image saved' & Cine loop
- ✓ Efficient Storage & Connectivity - Permanent storage of over 1,00,000 images with DICOM option and PACS & HIS RIS connectivity
- ✓ Flexible Power Management - Extra power for complex cases with Online UPS for steady & unchanged flow of power

Extraordinary Image Quality

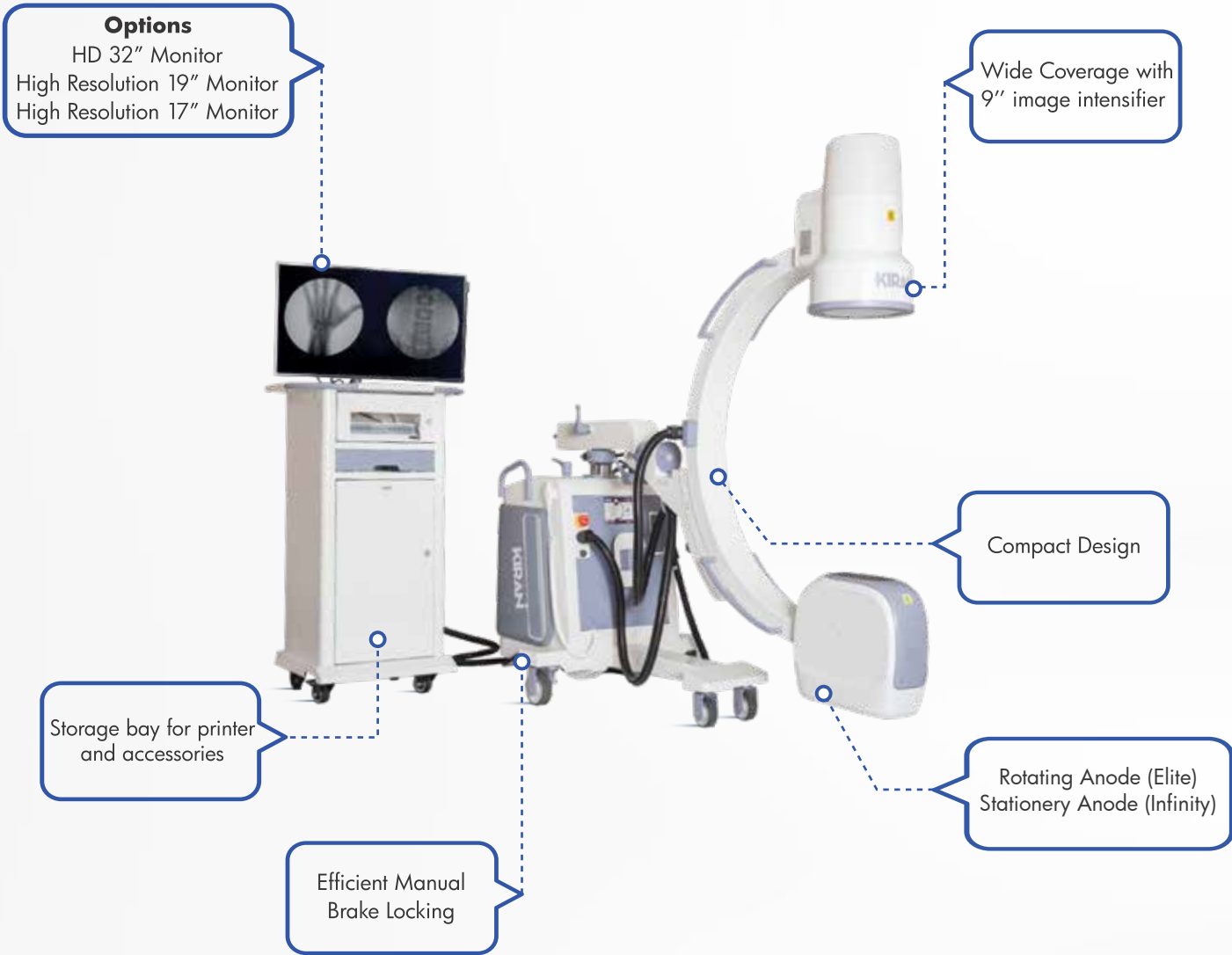


Technical Specifications

Key Features	Elite	Infinity
Output Power	5.0 kW	3.5 kW
Normal Mode Current	0.6 - 5.5 mA	0.6 - 4.5 mA
Pediatric Mode Current	0.1 - 2.5 mA	0.1 - 2.25 mA
Boost Mode Current	0.8 - 12 mA	0.8 - 8 mA
Snapshot Mode Current	0.8 - 12 mA	0.8 - 8 mA
Radiography Mode Current	35 - 80 mA	25 - 70 mA
Imaging Resolution	1.5K X 1.5K	1.5K X 1.5K
Monitor	Dual 19" Medical Grade Single 32" / 40" Monitor	Dual 19" Medical Grade Single 32" / 40" Monitor
Field of View	23 cm/9"	23 cm/9"
Free Space	800 mm	800 mm
Immersion Depth	680 mm	680 mm
Orbital Movement	140°	140°
	(35° to 105°)	(35° to 105°)
Image Storage	PC Based Memory - Storage depends on Hard Disk Space	PC Based Memory - Storage depends on HD Space more than 10,000 images
Portability of Image	USB Drive, LAN Connectivity, CD Writer & DICOM	USB Drive, LAN Connectivity, CD Writer & DICOM

Image Intensifier based C-Arm

Elite / Infinity C-Arm is a Comprehensive Surgical Imaging Solution by Kiran that gives you the Clinical Confidence required in the most challenging cases. With an Ergonomic Design & Streamlined Workflow, Elite offers excellent Clinical Value in a wide range of applications.



- Orbital Movement : 125°
- Free Space : 780 mm (±10 mm)
- SID : 980 mm (±10 mm)



- 200 mm (±10 mm) Horizontal C-Arm run, with manual braking for locking



- 270° C-Arm rotation on each side, with manual brake for locking



- 12.5° (±1°) C-Arm swivel on each side with manual brake for locking

✓ Digital Subtraction Angiography with Roadmap (Elite Series)

Digital Subtraction Angiography is used in Vascular Surgery to increase image quality of the vessel map by subtracting the background from the main required image. DSA with Roadmap is used to find blockage or aneurysm in arteries or veins with the help of vessel map & devices.

✓ 1K x 1K Digital Imaging Chain & Memory Unit with Advanced Image Acquisition, Processing, Management & StorageMore than 50,000 image storage with Digital Camera

✓ More than 50,000 image storage with Digital Camera

Technology made Friendly



Excellent
Image Quality



Unmatched
Efficiency



Optimal
Cost

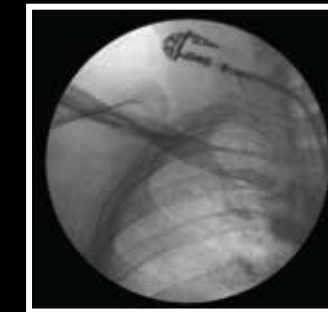
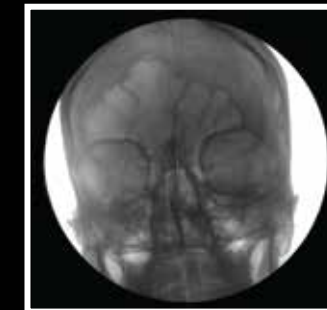


Smooth
Workflow

Designed for Versatile Applications

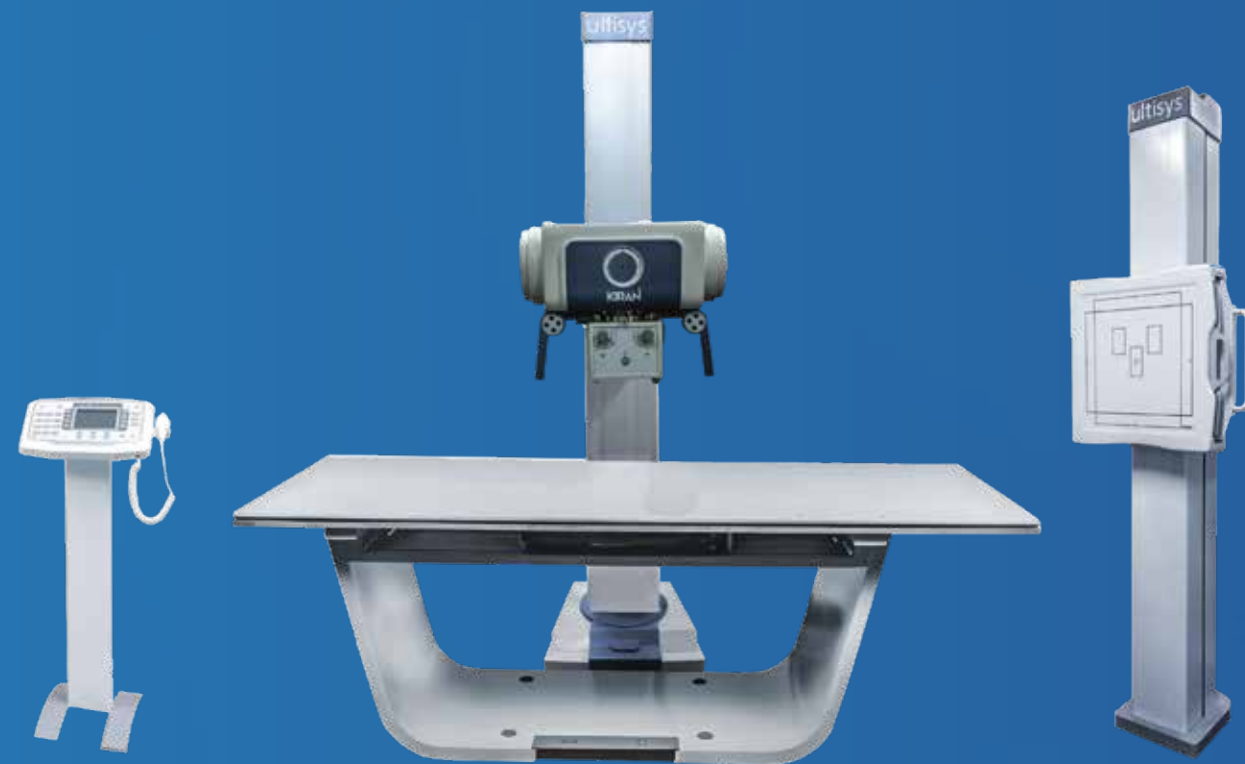


Extraordinary Image Quality



KEY FEATURES	ELITE	ELITE 1K X 1K	ELITE 1K X 1K-DSA
OUTPUT POWER	5.0 kW	5.0 kW	5.0 kW
NORMAL MODE CURRENT	0.6 - 5.5 mA	0.6 - 5.5 mA	0.6 - 5.5 mA
PEDIATRIC MODE CURRENT	0.1 - 2.5 mA	0.1 - 2.5 mA	0.1 - 2.5 mA
BOOST MODE CURRENT	0.8 - 12 mA	0.8 - 12 mA	0.8 - 12 mA
SNAPSHOT MODE CURRENT	0.8 - 12 mA	0.8 - 12 mA	0.8 - 12 mA
RADIOGRAPHY MODE CURRENT	35 - 80 mA	35 - 80 mA	35 - 80 mA
DSA MODE CURRENT			12 mA
kV	40 - 120 kV	40 - 120 kV	40 - 120 kV
IMAGING RESOLUTION	CCD-752 X 582 pixels	1K X 1K	1K X 1K
MONITOR	17" LCD Dual Monitors HD Option: 32" Monitor	19" LED Medical Grade	19" LED Medical Grade
FIELD OF VIEW	23 cm/9"	23 cm/9"	23 cm/9"
FREE SPACE	800 mm	800 mm	800 mm
IMMERSION DEPTH	680 mm	680 mm	680 mm
ORBITAL MOVEMENT	125°	125°	125°
	(+90° to -35°)	(+90° to -35°)	(+90° to -35°)
IMAGE RESOLUTION	≥ 2.2 lp/mm	≥ 2.43 lp/mm	≥ 2.43 lp/mm
IMAGE STORAGE	PC Based Memory - Storage depends on Hard Disk space with 17" Monitors	PC Based Memory - Storage depends on Hard Disk space with 17" Monitors	PC Based Memory - Storage depends on Hard Disk space more than 50,000 Images
	Standalone - Storage up to 100 images incase of 32" HD Monitor	Standalone - Storage up to 100 images incase of 32" HD Monitor	Standalone - Storage up to 100 images incase of 32" HD Monitor
PORTABILITY OF IMAGE	USB drive, LAN connectivity & CD writer. DICOM - Optional	USB drive, LAN connectivity & CD writer. DICOM - Optional	USB drive, LAN connectivity & CD writer. DICOM - Optional

KEY FEATURES	INFINITY	INFINITY - HD	INFINITY - 1K X 1K
OUTPUT POWER	3.5 kW	3.5 kW	3.5 kW
NORMAL MODE CURRENT	0.6 - 4.5 mA	0.6 - 4.5 mA	0.6 - 4.5 mA
PEDIATRIC MODE CURRENT	0.1 - 2.25 mA	0.1 - 2.25 mA	0.1 - 2.25 mA
BOOST MODE CURRENT	0.8 - 8 mA	0.8 - 8 mA	0.8 - 8 mA
SNAPSHOT MODE CURRENT	0.8 - 8 mA	0.8 - 8 mA	0.8 - 8 mA
RADIOGRAPHY MODE CURRENT	25 - 70 mA	25 - 70 mA	25 - 70 mA
kV	40 - 110 kV	40 - 110 kV	40 - 110 kV
IMAGING RESOLUTION	CCD-752 X 582 pixels	CCD-752 X 582 pixels	1K X 1K
MONITOR	19" Optional	32" HD	19" LED Medical Grade
FIELD OF VIEW	23cm/9"	23cm/9"	23cm/9"
FREE SPACE	800 mm	800 mm	800 mm
IMMERSION DEPTH	680 mm	680 mm	680 mm
ORBITAL MOVEMENT	125°	125°	125°
	(+90° to -35°)	(+90° to -35°)	(+90° to -35°)
IMAGE RESOLUTION	≥ 2.2 lp/mm	≥ 2.4 lp/mm	≥ 2.6 lp/mm
IMAGE STORAGE	Standalone - storage up to 100 images	Standalone - storage up to 100 images	PC Based Memory - Storage depends on HD space more than 10,000 images
PORTABILITY OF IMAGE	USB Drive and LAN Connectivity	USB Drive and LAN Connectivity	USB drive, LAN connectivity & CD writer. DICOM - Optional



RADIOGRAPHY SYSTEMS

Ultisys 20/40/52/82

Ultisys is a Versatile Radiography System with wide clinical applications and Intuitive Control Console comprising of Integrated Graphical Display APR (Anatomical Programming) and Optional AEC (Automatic Exposure Control). It is ergonomically designed for complete flexibility to cover full body examination without patient repositioning and radiographs of standing and supine patients including patients on wheelchairs and stretchers.

Ultisys has Scalability with a wide range of X-ray generators adaptable to specific application & system configuration and is easily upgradable to Full Digital Radiography System.

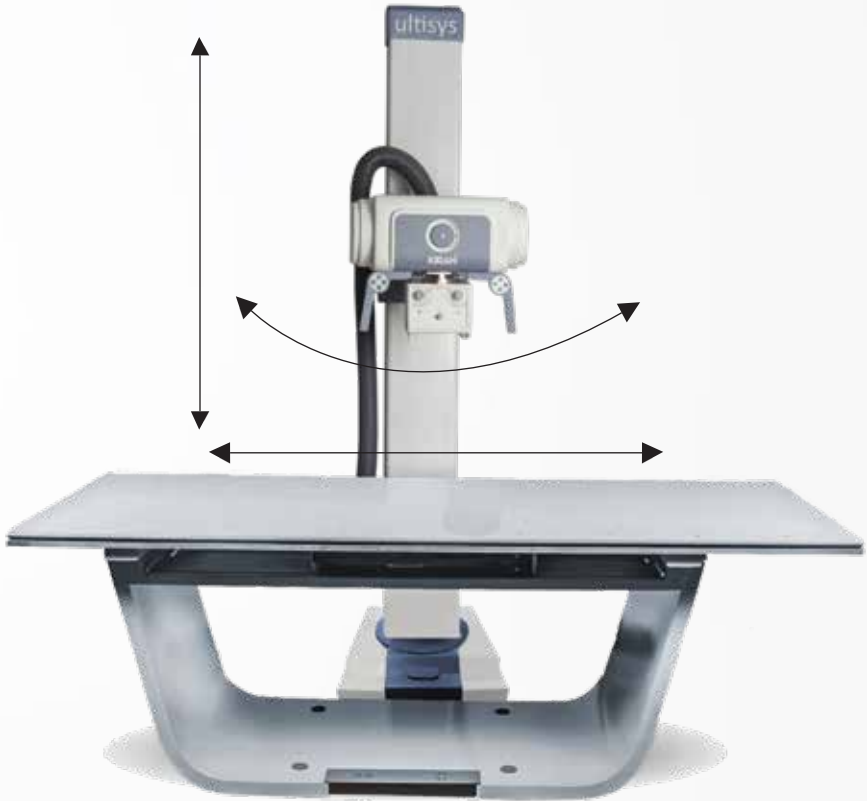
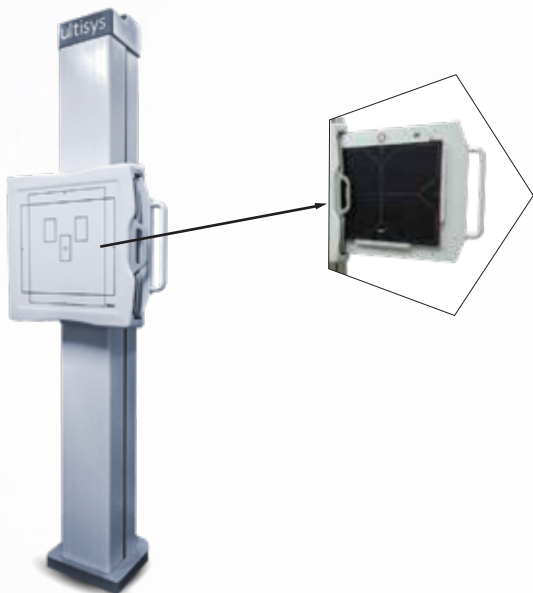


Table Top Specifications	L : 2180mm x W : 890mm x H : 760mm
	Filtration 0.9 mmAl
Bucky type	Max. Patient Weight 200kg Upgradable to 300 kg
Brake Mechanism	Oscillating bucky with integrated High Density Grid.
Anit Scatter Grid	Electro-Magnetic (Longitudinal and Transverse movement)
	Ratio 10:1, 103 LPI, Focal Distance : 100cm

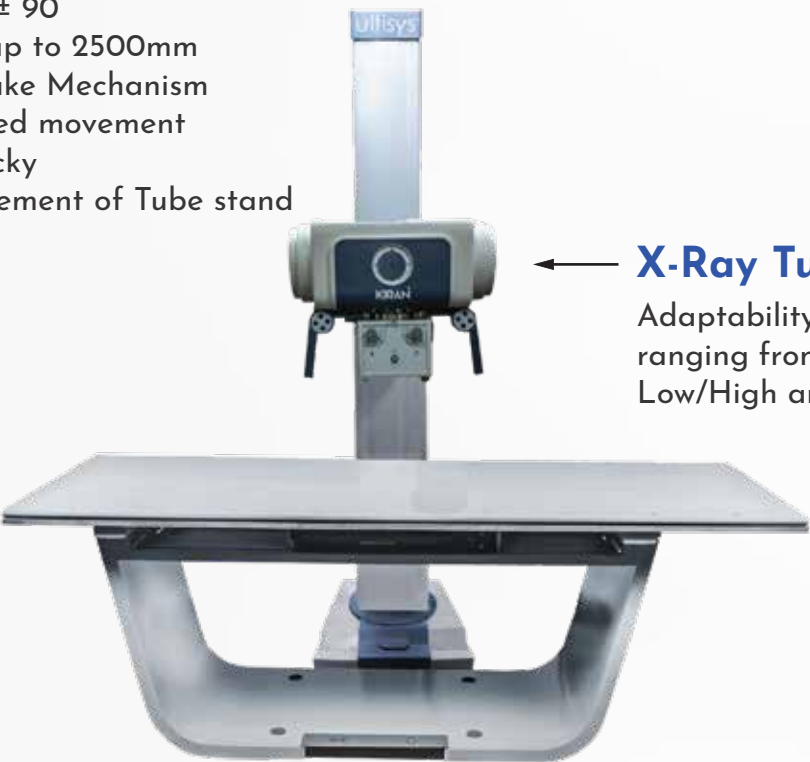
Vertical Bucky Stand

Vertical Travel up to 1260mm
Electromagnetic Locking System
Oscillating Bucky with integrated high density Anti-Scatter Grid
Anti-Scatter Grid 10:1, 103 LPI & Focal Size: 150 cm



Ceiling Free Tube Stand

Tube rotation angle $\pm 90^\circ$
Longitudinal travel up to 2500mm
Electro-magnetic Brake Mechanism
Fully counter-balanced movement
Tube centered to Bucky
Central Control Movement of Tube stand



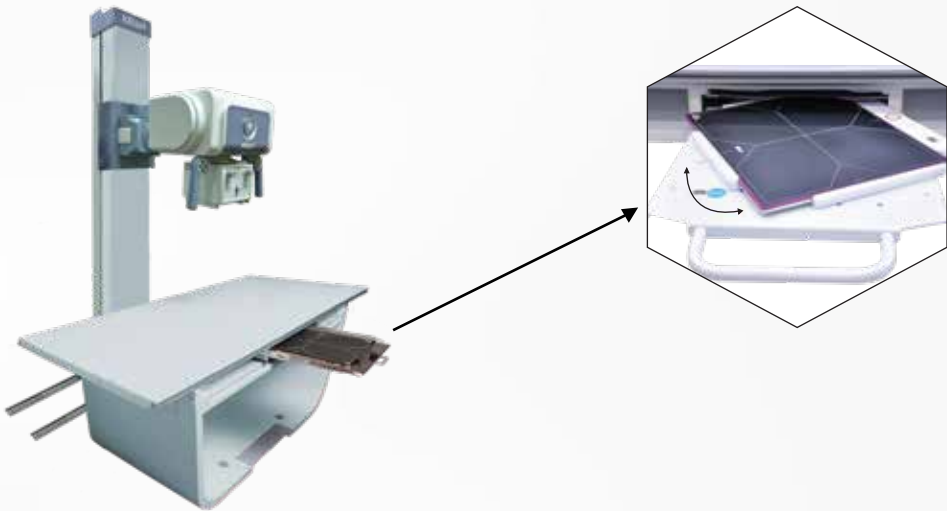
X-Ray Tube
Adaptability to variety of X-Ray tubes ranging from 140kHU to 400kHU and Low/High anode speed rotation

Generator options

Output Rating	20 kW	40 kW	52 kW	82 kW
kV Range	40-125 kV	40-125 kV	40-150 kV	40-150 kV
mA Range	80-250 mA	10-500 mA	10-640 mA	10-1000 mA
mAs Range	1-320 mAs	0.1-500 mAs	0.1-500 mAs	0.1-500 mAs
Maximum Output Power mA/kW@0.1s	250mA@60 kV	400/16@40 kV	400/16@40 kV	400/16@40 kV
	160mA@80 kV	500/30@60 kV	630/39@60 kV	800/48@60 kV
	120mA@100 kV	500/40@80 kV	625/50@80 kV	800/64@80 kV
		400/40@100 kV	500/50@100 kV	800/80@100 kV
		320/40@125 kV	400/50@125 kV	640/80@125 kV
			330/50@150 kV	530/80@150 kV
Leakage Radiation	<2 mR/hr	<2 mR/hr	<2 mR/hr	<2 mR/hr

Rotating Bucky

Bucky rotation upto 90°



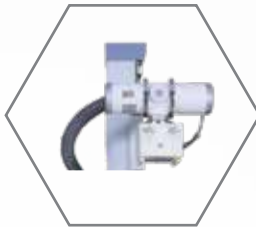
Eco Series

Ultisys Eco Series - An affordable & robust Analog/ Digital Radiography System with best-in-class features and intuitive design. Offer your patients the first choice for all radiographic examinations from skull, pelvis to extremities.

Our high frequency X-Ray Generator is compact in size and produces consistent output with negligible skin dose.



Robust X- Ray



- Dual focus rotating anode X-Ray Tube
- 20 kW generator compatible for all types of radiography procedures
- Focal spot SF 1.0 x 1.0 mm & LF 2.0 x 2.0 mm

Celling Free Tube Stand



- Tube rotation angle +- 90
- Tube column rotation 180
- Longitudinal travel upto 1880 mm
- Electromagnetic brake mechanism
- Fully Counter-balanced movement
- Tube centered to Bucky
- Central control movement of tube stand

Smart Console



Power Rating	20KW
Line Voltage, Phase	400VAC ±10%
Supply Main Resistance	<0.12 Ω
Line Voltage Range	±10% (Frequency: 50/60Hz)
kV Voltage Range	40-125KV
mA range	10 to 250mA/320 mA
Timer range	0.001 to 10.0 sec
mAs range	0.1 to 500mAs
Momentary Current	65A@400 Vac
Standby Current	1.5A@400Vac
Maximum Power Output (Reproducibility related to loading factors)	250mA@80kV
Rotor supply	Low speed
Anatomical Programs	User programmable max. 974 programs
Technique Selection	kV/mA/ms, kV/mAs, AEC, APR
Image Receptors	2 Bucky + 1 non Bucky
Leakage Radiaton	<2mR/hr
Radiation Output Accuracy	C. V. (Coefficient of Variation) ≤0.05

Table Options



Standard Table with Bucky



Floating Table - 4 Position



5 - Position Table



Bucky Table with Wheels

Diagnostic Medical Monitor

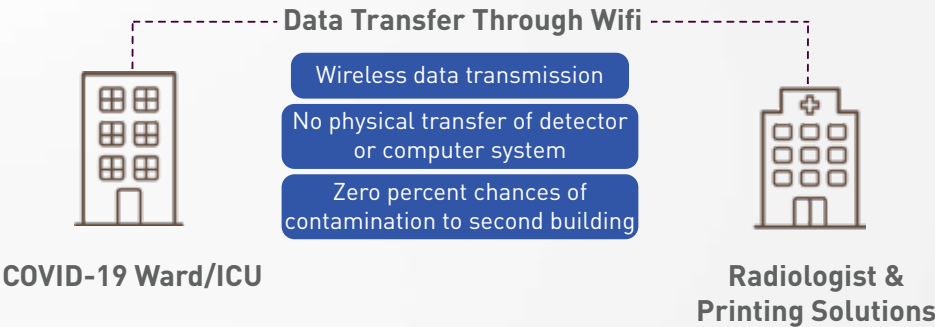
DICOM IMAGES WITH HIGH ACCURACY



Features

- Display : 19"
- Resolution : 1280x1024
- Max. Brightness : 1000 cd/m
- Viewing Angle : 170°/170°
- 4096 Gray Scale Diagnostic Medical Display
- Easy Installation
- Brightness Stabilization
- Long Lasting Continuous Working Steadily
- DICOM Compatibility
- Compliance to International Medical Standard
- Application : DSA/ DSI/ CT/ PACS Acquisition Workstation
- Input port : DVI/ VGA/ VIDEO/ S-VIDEO

Ultisys 3.5
Digital Radiography Solutions



Flat Panel Detector	Single Detector- Wireless/Wired
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Amorphous Silicon Flat Panel Detector (14"x17") with PIN Technology	
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Scintillator:	Cesium Iodide (High Stability CSi Scintillator)
Weight (incl battery)	<150 kg (including Stand, Monitor, Review Monitor & X-Ray)

Ultisys 3.5
Mobile Radiography Solutions



Easy to
Interface
with DR



The Ultisys Advantage

- Accurate positioning and precise movement, ease of mobility with braking and locking system
- Micro-processor based control system
- Intuitive operation based on Anatomical Program (APR)
- Independent selection of parameters (kV, mAs) with digital display
- Less exposure time, reduced motion artifacts
- Covers all postions with Spring Balanced Mechanism

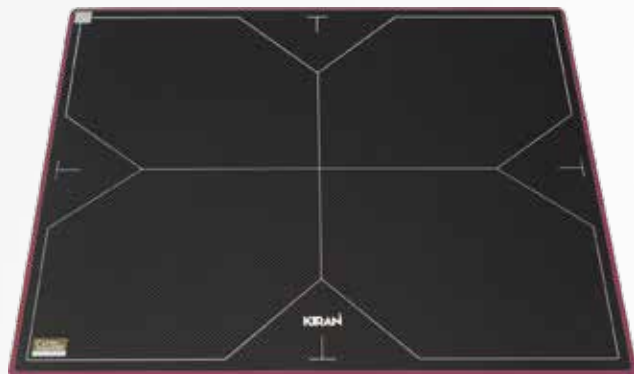


Technical Specifications

Model		KIRAN Ultisys 3.5 kW		Tube Stand	
Generator Output Rating	3.5kW	Frequency	High Frequency	Tube Stand	Spring Balanced Stand, light weight, easy to carry and position
kV Range	40-110kV	mA Max	100mA	Wheels	4 wheels
mAs Range	1-250mAs	Anatomical Programs	128 programs with APR utility	Collimator	A manual light beam diaphragm with rotation for adjustment of exposure area, provision of auto shut off after 45 seconds.
Display	2 point	X-ray tube head	Monoblock version Stationary Anode	Electrical Rating	230V AC, 15A, 50/60Hz
		Weight	<150kg		

Ultisys DR Retrofit Kit

Convert an existing Analog X-Ray system to a low dose, High Resolution Digital Radiography System with Kiran Ultisys Digital Radiography. A Lightweight, Wireless Detector with Wi-Fi enabled system that provides ease of sharing DR solution across multiple X-Ray systems.



FLAT PANEL DETECTOR



Wi-Fi
Wireless Acquisition & Transfer



Scintillator
Direct Deposit CsI:TI



Digital Retina T echnology
Lightning Fast Acquisition
Powerful Image Processing
High Resolution Display



Full Field AED
Auto Trigger Mechanism

Easy Workflow

Easily configurable between wired and wireless modes of operation Light weight and slim design with built-in foldable handle 14" x 17" cassette-sized wireless detector

Wide Operating Environment

Extra long battery life with 1400 shots and 7 hours stand-by time
Operating Temperature Range is from 5°C - 35°C

High Image Quality

The best performance CsI direct-deposition technology on TFT/PIN PD panel and low noise electronics

Lower Doses

Reduction in dosage up to 50%



Usage

Convert any Analog X-ray to a full Digital Radiography Solution with DR Retrofit Kit

Lightweight, wireless, rugged, cassette sized detector that can be used with both mobile and fixed X-ray system.

Benefits

14" x 17" cassette-sized wireless detector
Extra-long battery life with 1400 shots and 7hours stand-by time
The best performance CsI direct -deposition technology on TFT / PIN PD panel and low noise electronics
Better image quality at the lowest dose
Shorter exposure time avoiding kinetic blurring
Instant image display leading to higher throughput

Software

Intuitive Image Acquisition & Image Processing





MAMMOGRAPHY SYSTEMS

World Class X-Ray Source

Biangular X-Ray tube provides significantly higher mA loading and output while maintaining focal spot result in exceptionally high quality, high resolution images for both full field and magnification view

Rhenium Tungsten target X-Ray tube with rhodium and silver filter reduces radiation dose to the patient without compromising the image quality



Small Focus(0.1 mm)
Optimum imaging
for magnification views

Large Focus(0.3 mm)
Optimum imaging for
full field views

Approved by BIS & AERB

Efficient Detector

Cesium Iodide detector has broader operating temperature range enabling better image quality at low dose

77 micron pixel pitch helps in delineating the smallest of calcifications which is a pivotal aspect aiding early detection.

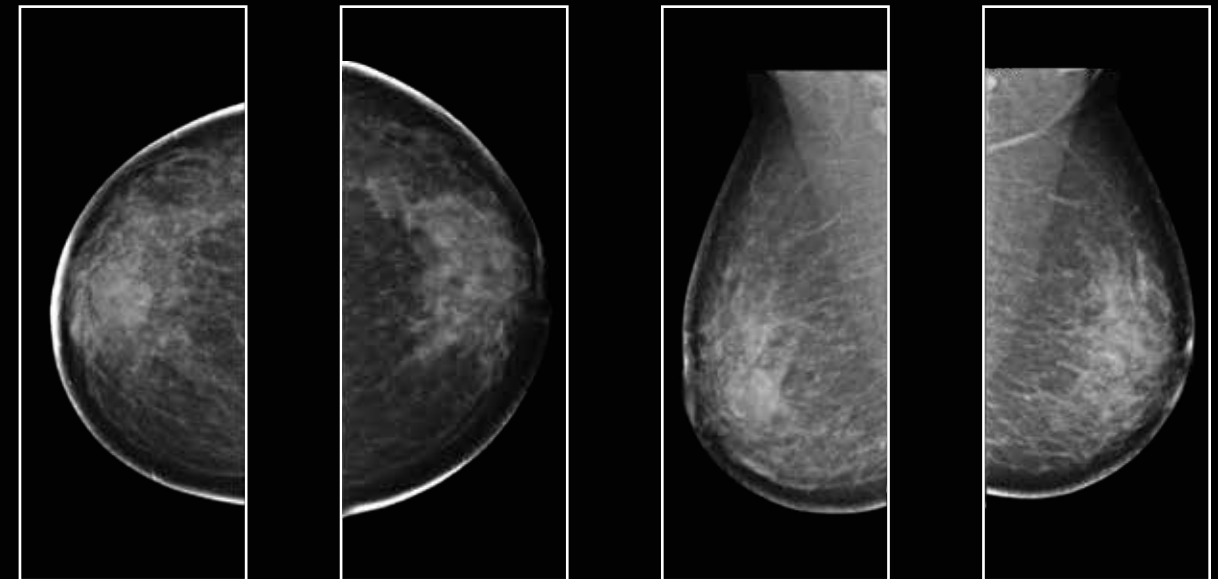


Intelligent exposure control

State of the art **AEC sensor** provides excellent and consistent image quality.

Provides Manual, & Automatic AEC to select exposure factors to compensate for composition and object thickness.

Extraordinary Image Quality



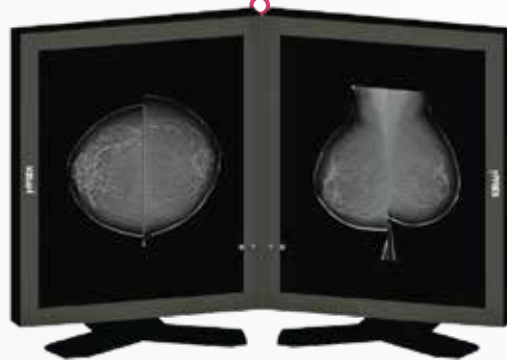
0.5 mm Lead Equivalent Glass Operator Console

Acquisition Workstation with 1 MP High resolution 19" Color LCD display

Optional upgrade to 23" , 2 MP LCD Display



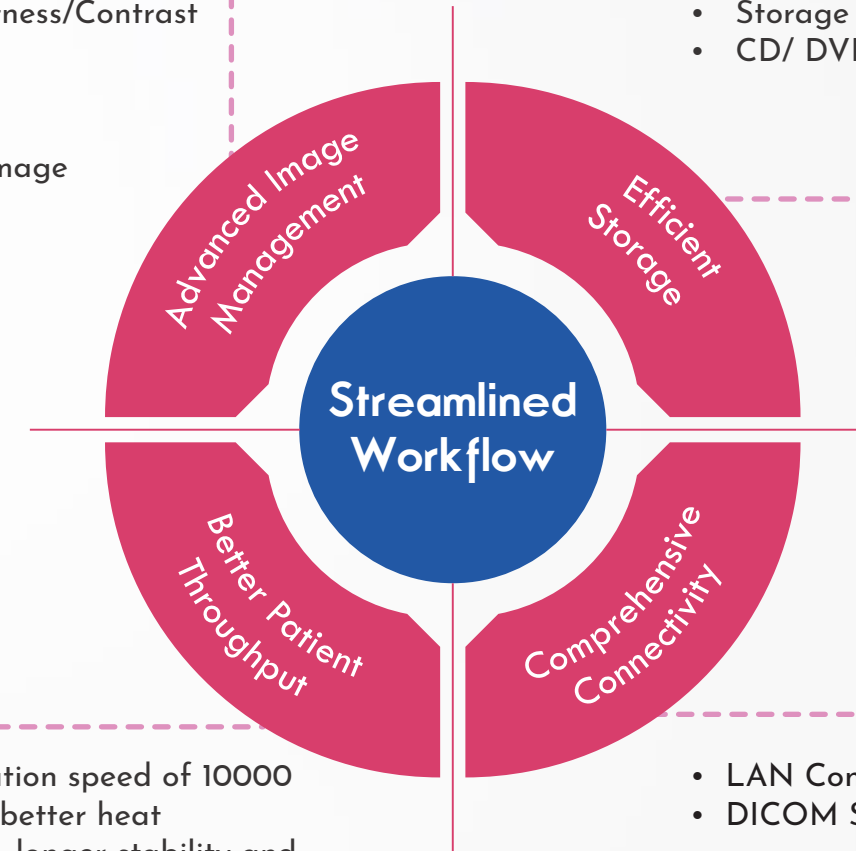
Review Workstation with dual 5 MP High Resolution Monochrome Monitors for Advanced Reports Management and Precise Diagnosis



- All mammography studies are automatically scaled and aligned to ensure optimal side by side comparison
- Optimization of patient's data management for long term follow-up

- Brightness/Contrast
- Zoom
- Pan
- Invert
- Flip Image

- Storage Capacity - 1 TB
- CD/ DVD & USB 3.0



- Anode rotation speed of 10000 rpm allows better heat dissipation, longer stability and more PatientThroughput
- Faster Image Acquisition & Image Processing in comparison with Conventional Mammography
- Auto Collimation is available based on the Paddle selection which saves time

- LAN Connectivity
- DICOM Services

Face shield for ideal positioning that prevents the entry of face in direct x-ray path.

65 cm Source to Image Distance & 25 cm compression paddle movement allow for easy positioning & utmost patient comfort

Felicia
Larger Detector with 24 x 30 cm field view, allows you to image wider range of patient profile without requiring additional exposures

Superior Soft Touch Switch and Touch Screen Display – for ease of operation and comfortable patient positioning

Designed for Easy Serviceability



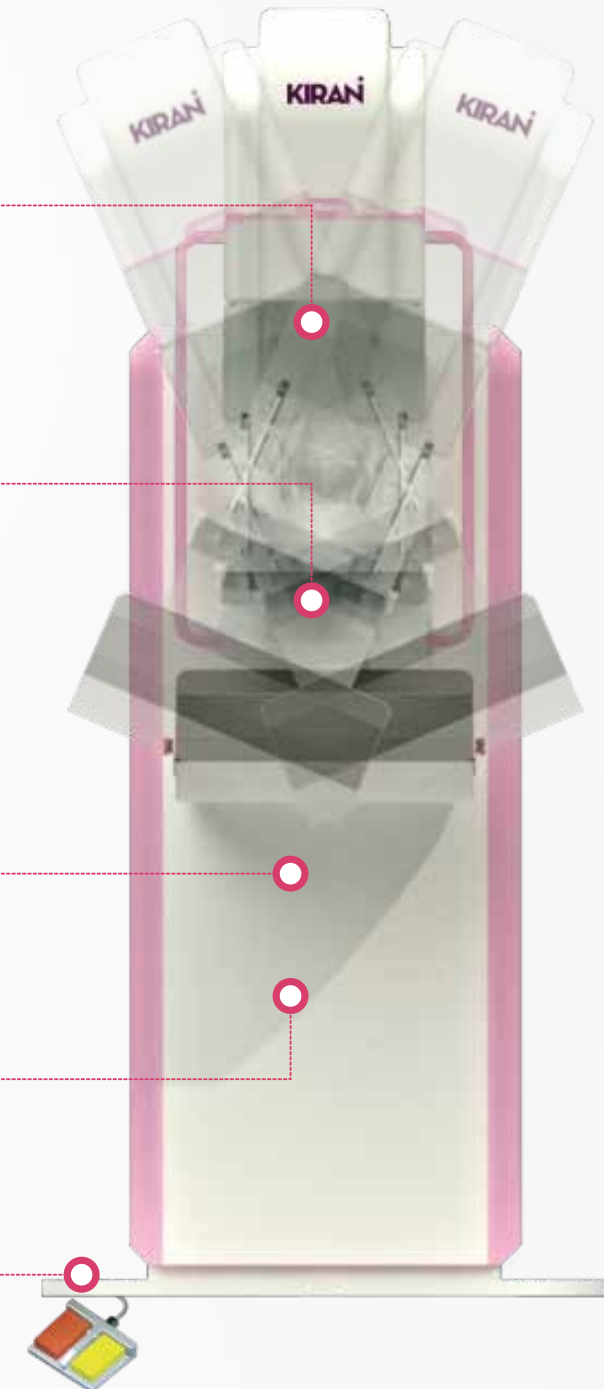
-150° to +185° Tube Angulation for Easier Patient Positioning
Vertical Movement
74 cm to 134 cm

Flex Paddle Technology accommodates the natural contour of the breast and allows image capture with reduced patient discomfort.

Collapsible feature converts the stand-alone system into mobile unit for Mammography Screening Vans with ease

Compact & Sleek with minimal Footprint

Dual foot switch from LHS & RHS positioning of the patient during procedure



World Class X-Ray Source

Biangular X-Ray tube provides significantly higher mA loading and output while maintaining focal spot result in exceptionally high quality, high resolution images for both full field and magnification view

Molybdenum target X-Ray tube with rhodium and molybdenum filter for superior image quality

Small Focus(0.1 mm)
Optimum imaging for magnification views

Large Focus(0.3 mm)
Optimum imaging for full field views

State of the art **AEC sensor** provides excellent and consistent image quality. Provides Manual, & Automatic AEC to select exposure factors to compensate for composition and object thickness.

*Coming Soon



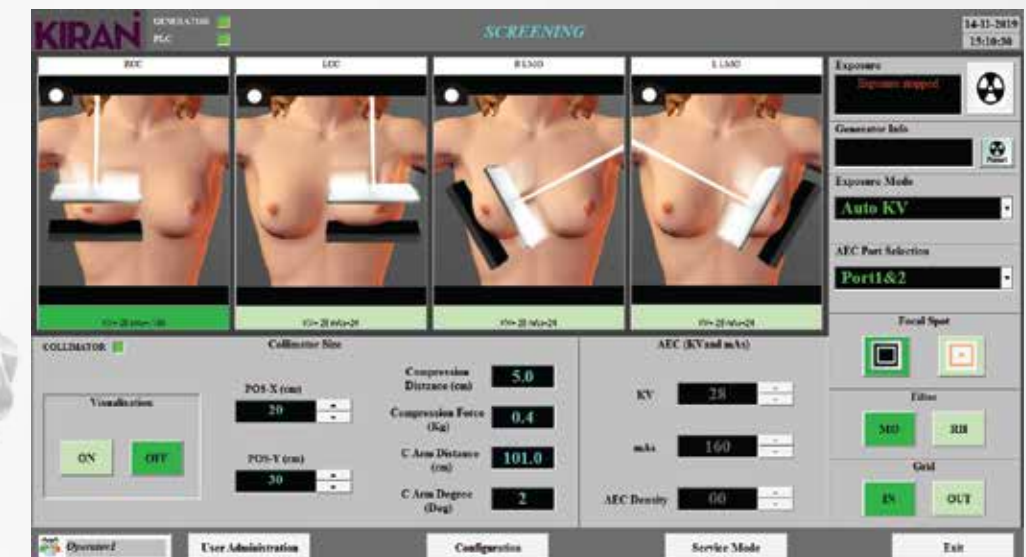
0.5 mm Lead Equivalent Glass Operator Console

Acquisition Workstation with 1 MP High resolution 19" Color LCD display

Easy to Upgrade to Digital Mammography



Intuitive User Interface



Face shield for ideal positioning that prevents the entry of face in direct x-ray path.

65 cm Source to Image Distance & 25 cm compression paddle movement allow for easy positioning & utmost patient comfort

Dual Bucky - 18x24cm and 24x30cms Bucky allows imaging of all size Breasts

Superior Soft Touch Switch and Touch Screen Display - for ease of operation and comfortable patient positioning

Designed for Easy Serviceability



-150° to +185° Tube Angulation for Easier Patient Positioning

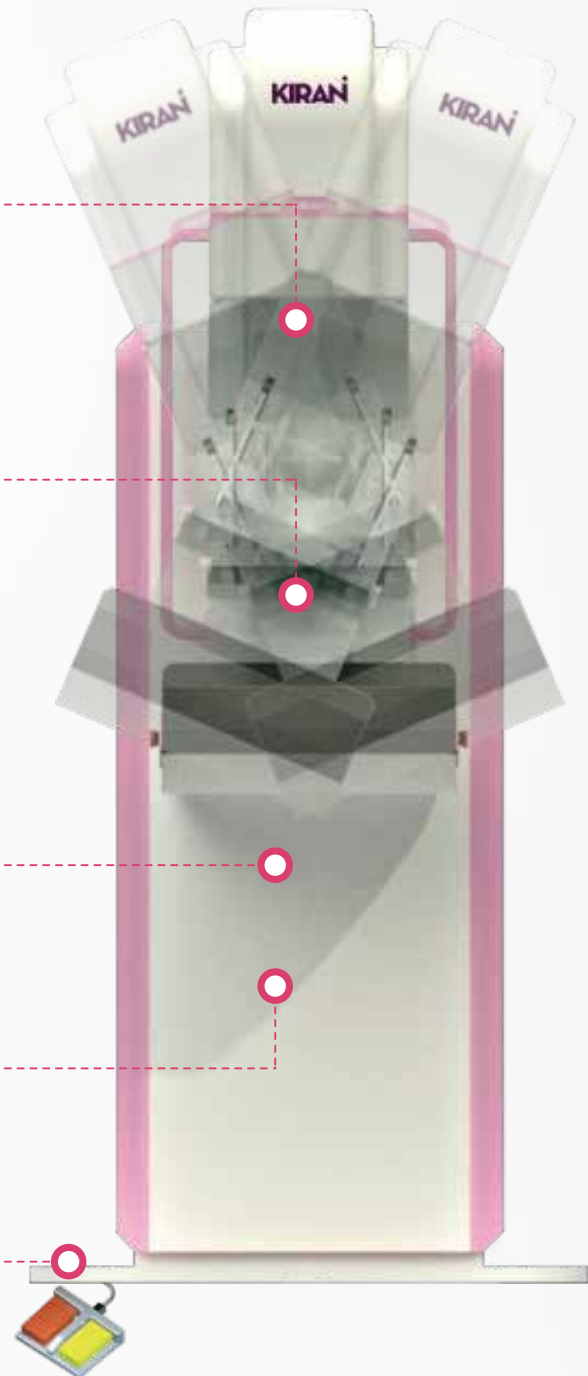
Vertical Movement
74 cm to 134 cm

Flex Paddle Technology accommodates the natural contour of the breast and allows image capture with reduced patient discomfort.

Collapsible feature converts the stand-alone system into mobile unit for Mammography Screening Vans with ease

Compact & Sleek with minimal Footprint

Dual foot switch from LHS & RHS positioning of the patient during procedure





RADIATION PROTECTION PRODUCTS

The Secret Ingredients

World-Class Core materials have been the cardinal components of Kiran's Radiation Protection Products. The core materials are made possible through extensive research in particle engineering and cutting edge material science and offer maximum protection from ionizing radiation.

Wide Range of Core Materials

ZeroLeadAIR™

The World's Finest



10% Lighter than Zerolead



Micro Particle Bismuth & Antimony



Ecofriendly Material



Odour-Free Plasticizers



Lesser Fatigue




Ultimate Comfort




Micro Particle Technology for better protection from scatter radiation

ZeroLead®


An Eco-friendly Technological Breakthrough




Extremely Light




Bismuth & Antimony particles




Ecofriendly Material




Odour-Free Plasticizers



Resistant to Humidity



Lesser Fatigue



Stability between -20° to +70° Centigrade

ultralite™

An Optimized Weight Sheeting



Lighter than Leadlite



Antimony & Lead particles



Optimum Safety



Odour-Free Plasticizers



Resistant to Humidity



Ergonomic Comfort



Stability between -20° to +70° Centigrade

LEADLITE®

The Industry Standard Re-defined



Lightest Lead Material



Purest & Finest Lead Particles



Use of minimum Bonding & Mineral oils



Odour-Free Plasticizers



Resistant to Humidity



Materials remain supple for several years




Stability between -20° to +70° Centigrade

- Maximum protection against scattered radiation—a key health consideration
- Protection for the upper body and the sensitive thyroid gland at a lead equivalence of 0.50 mm Pb & 1.00 mm Pb
- Basic back protection required for use in CT Scans and Cath labs at a lead equivalence of 0.25 mm Pb
- Solutions for the varying needs of X-ray technicians, medical professionals, and patients

Radiation Attenuation Data




Protection at Various Voltages		% Attenuation				
		0.25 mm	0.35 mm	0.50 mm	1.00 mm	
	Radiation Energy Beam Level	60 kV	97 %	99 %	100 %	≥ 100 %
		70 kV	94 %	98 %	99 %	100 %
		80 kV	91 %	96 %	98 %	100 %
		90 kV	88 %	94 %	96 %	99 %
		100 kV	85 %	92 %	95 %	99 %
		110 kV	82 %	90 %	93 %	99 %
		120 kV	80 %	88 %	92 %	98 %
		130 kV	78 %	86 %	91 %	97 %

Protection at Various Voltages			% Attenuation			
			0.25 mm	0.35 mm	0.50 mm	1.00 mm
ZeroLead®	Radiation Energy Beam Level	60 kV	97 %	99 %	100 %	≥ 100 %
		70 kV	94 %	98 %	99 %	100 %
		80 kV	91 %	96 %	98 %	100 %
		90 kV	88 %	94 %	96 %	99 %
		100 kV	85 %	92 %	95 %	99 %
		110 kV	82 %	90 %	93 %	99 %
		120 kV	80 %	88 %	92 %	98 %
		130 kV	78 %	86 %	91 %	97 %

*Uncertainty of Measurement: ±4%

Radiation Attenuation Data

Kiran’s Products offers maximum Radiation Attenuation at broad-beam conditions according to ASTM 2547-18. The Lead Equivalence is determined using narrow as well as inverse broad-beam geometry according to EN 61331-1:2014 & EN 61331-3 : 2014 for the specified range - 50kV to 150kV

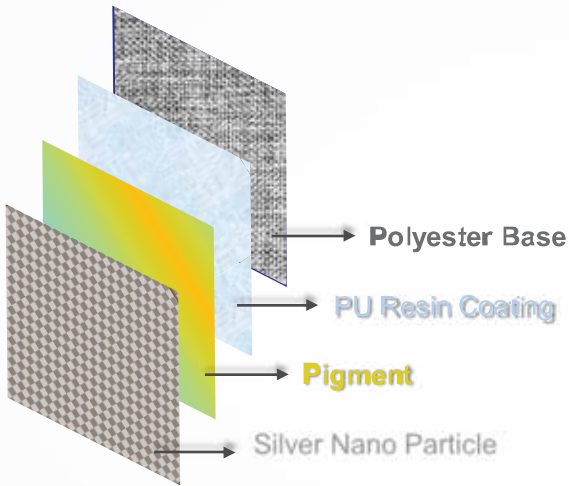
Protection at Various Voltages			% Attenuation			
			0.25 mm	0.35 mm	0.50 mm	1.00 mm
	Radiation Energy Beam Level	60 kV	97 %	99 %	100 %	≥ 100 %
		70 kV	94 %	98 %	99 %	100 %
		80 kV	91 %	96 %	98 %	100 %
		90 kV	88 %	93 %	96 %	99 %
		100 kV	85 %	91 %	95 %	99 %
		110 kV	83 %	90 %	94 %	99 %
		120 kV	81 %	88 %	93 %	98 %
		130 kV	79 %	86 %	91 %	99 %

Protection at Various Voltages			% Attenuation				
			0.25 mm	0.30 mm	0.35 mm	0.50 mm	1.00 mm
LEADLITE®	Radiation Energy Beam Level	60 kV	97 %	98 %	99 %	100 %	≥ 100 %
		70 kV	95 %	97 %	98 %	99 %	100 %
		80 kV	92 %	94 %	96 %	97 %	100 %
		90 kV	88 %	92 %	94 %	96 %	99 %
		100 kV	86 %	90 %	92 %	95 %	99 %
		110 kV	85 %	88 %	91 %	94 %	99 %
		120 kV	84 %	87 %	91 %	94 %	99 %
		130 kV	82 %	87 %	90 %	93 %	99 %

Satin touch

Smooth • Comfortable • Hygienic

Satin Touch includes a range of fabric that are infused with silver nanoparticles which impart antimicrobial properties to the fabric thereby preventing microbial growth. This advanced material provides all the benefits, while offering a super smooth satin feel, making it extremely comfortable to wear over long durations.



Wide Range of Color Options

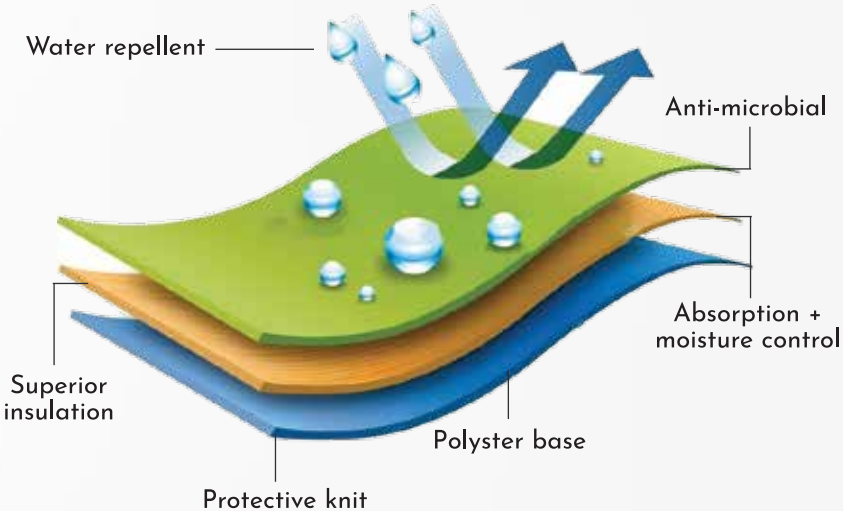


Maxin Fabric

XPERIENCE
HE LIGHTEST

ADIATION PROTECTION APPAREL





- Water Repellent
- Superior Insulation
- Absorption + Moisture Control
- Polyester Base
- Protective Knit





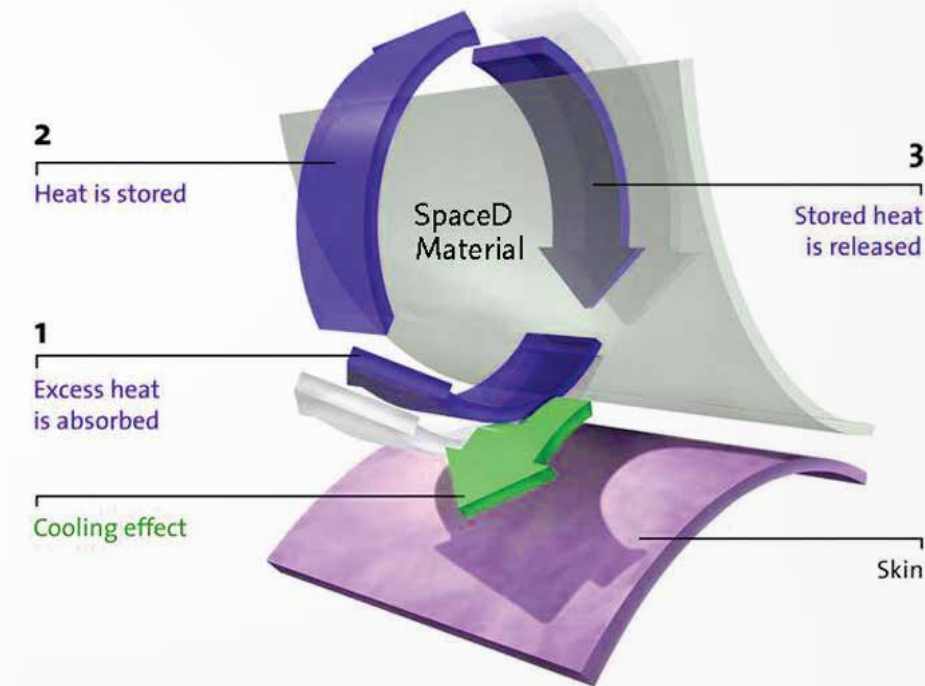
Space Technology now for
Medical Professionals

The Zenith of Radiation Protection

-  Absorbs, stores & releases heat for optimal thermal comfort
-  Helps maintain a comfortable, balanced body temperature
-  Absorbs excess body heat to prevent sweating
-  Anti-microbial with silver nano particles



How SpaceD Technology Works



One of Kiran's most unique offering is its temperature regulating inner fabric with SpaceD technology is the only phase change material that carries the Certified Space Technology seal of approval. SpaceD fabric keeps the temperature at optimal levels with not too hot...**not too cold....Just Right.**



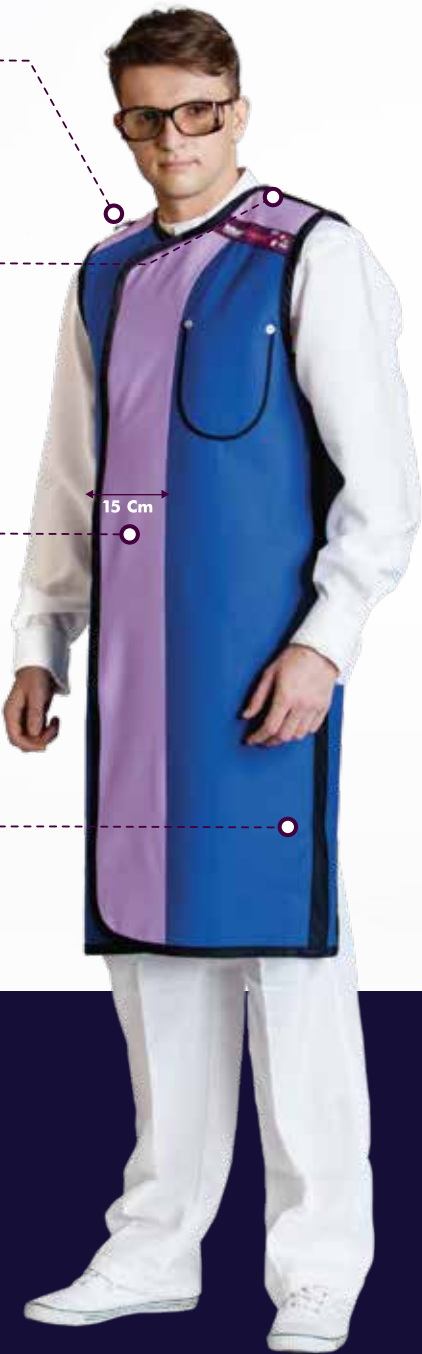
Radiation Protection Products

Loop for attaching Thyroid Shield

Anti-skid Padded Shoulder
(For comfort and weight distribution)

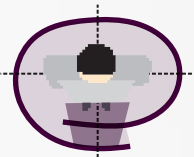
Frontal overlap of 15 cm

Side slit for better mobility



Radiation Protection Products

Protection Area



- Fabric Type -

Satin touch
Smooth • Comfortable • Hygienic

Maxin Fabric

SPACEED
CERTIFIED SPACE TECH APRON

Velcro Panels for Improved fit

Snap Lock for Comfortable fit



Ideal For

1. Cathlabs
2. Interventional Surgical Procedures
 - Interventional Radiology
 - Interventional Cardiology
 - Interventional Urology

Lead Equivalence

Front Protection

Back Protection

0.50 mm Pb

0.35 mm Pb

0.25 mm Pb

Customization Options

Accessories



Extra Belt outside
(to reduce Back & Shoulder stress)



Name Tag



Embroidery
(in Pockets)



Thyroid Shield

ZeroLead*AIR*

ZeroLead[®]

ultralite[™]

LEADLITE[®]

Radiation Protection Products

Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

Pockets Included

Complete frontal overlap for added protection against scattered radiation

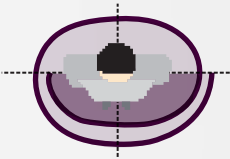


Wide Belt Provided – 4 inch or 6 inch supportive belt keep the garment's weight off the shoulder and hip while providing lumbar support.

Snap Lock for Comfortable fit

Radiation Protection Products

Protection Area



- Fabric Type -

Satin touch
Smooth • Comfortable • Hygienic

Maxin Fabric

SPACEED
CERTIFIED SPACE TECH APRON

Ideal For

1. Cathlabs
2. Interventional Surgical Procedures
 - Interventional Radiology
 - Interventional Cardiology
 - Interventional Urology

Lead Equivalence

Front Protection

Back Protection

0.50 mm Pb

0.35 mm Pb

0.25 mm Pb

Customization Options



Name Tag



Embroidery
(in Pockets)



Thyroid Shield
(Attachable Loop)

ZeroLead*AIR*TM

ZeroLead[®]

ultraliteTM

LEADLITE[®]

Radiation Protection Products



Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

Pockets Included

Vest Closure with 3 Velcros (2 inch each) for comfortable fit

Vest overlaps skirt for upto 15 cm which provides additional lower body protection

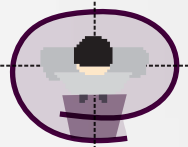


Adjustable Velcro panels for Comfortable Fit

Snap Lock for proper fit

Radiation Protection Products

Protection Area



- Fabric Type -

Satin touch
Smooth • Comfortable • Hygienic

Maxin Fabric

SPACEED
CERTIFIED SPACE TECH APRON

Ideal For

- 1. Cathlabs
- 2. Interventional Surgical Procedures
 - Interventional Radiology
 - Interventional Cardiology
 - Interventional Urology

Lead Equivalence

Front Protection		Back Protection
0.50 mm Pb	0.35 mm Pb	0.25 mm Pb

Customization Options



Name Tag




Embroidery (in Pockets)



Thyroid Shield (Attachable Loop)

Radiation Protection Products



Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

4 inch Velcro closure for a Snug Fit

Snaps lock for proper fixation

Pockets Included

Front Opening for ease of wearing

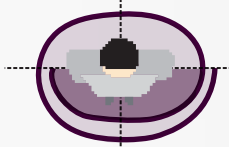


Vest Overlaps the skirt for sufficient length to ensure protection during movements like Bending forward

Skirt Design for Free Movement

Radiation Protection Products

Protection Area



- Fabric Type -

Satin touch
Smooth • Comfortable • Hygienic

Maxin Fabric

SPACEED
CERTIFIED SPACE TECH APRON

Ideal For

- 1. Cathlabs
- 2. Interventional Surgical Procedures
 - Interventional Radiology
 - Interventional Cardiology
 - Interventional Urology

Lead Equivalence

Front Protection		Back Protection
0.50 mm Pb	0.35 mm Pb	0.25 mm Pb

Customization Options



Name Tag



Embroidery (in Pockets)



Thyroid Shield (Attachable Loop)

Radiation Protection Products

Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

Pockets Included

Also available Flex Back (Elastic belt provides lumbar support & improved fit)

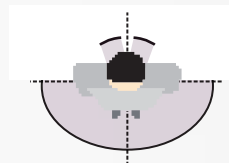
Complete frontal protection



Velcro Closure for a Enhanced Fit

Radiation Protection Products

Protection Area



- Fabric Type -

Satin touch
Smooth • Comfortable • Hygienic

Maxin Fabric

SPACEED
CERTIFIED SPACE TECH APRON

Ideal For

- Interventional Radiology Procedures

Lead Equivalence

Front Protection

0.50 mm Pb

0.35 mm Pb

0.25 mm Pb

Customization Options



Name Tag



Embroidery (in Pockets)



Thyroid Shield (Stitched & Integrated)

Accessories

Radiation Protection Products

Radiation Protection Products

Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

Pockets Included

Wide Stretchable Wings, enables adjustments & provides a Snug Fit and Shoulder relief.

Front Snap Lock for proper fixation



Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

Pockets Included

Complete Frontal Protection



Protection Area



- Fabric Type -
Satin touch
Smooth • Comfortable • Hygienic

Back Snap Lock for proper fixation



Lead Equivalence

Front Protection

0.50 mm Pb	0.35 mm Pb
------------	------------

Customization Options



Name Tag



Embroidery (in Pockets)



Thyroid Shield (Stitched & Integrated)

Radiation Protection Products



Lead Equivalence

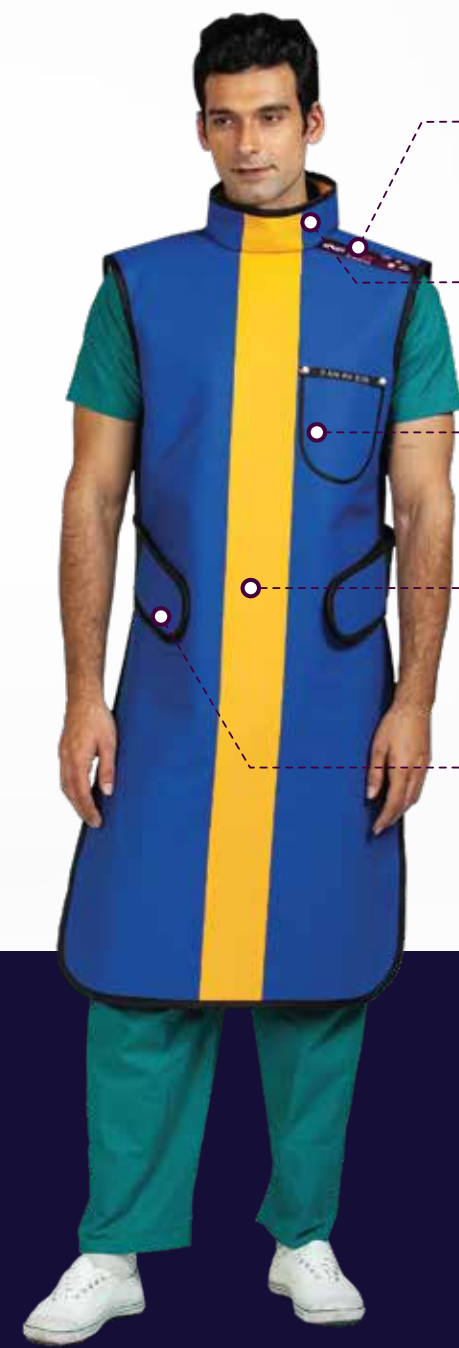
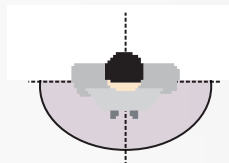
Front Protection

- 0.50 mm Pb
- 0.35 mm Pb

LEADLITE®

Radiation Protection Products

Protection Area



Anti-skid Shoulder Pads to reduce stress & for equal weight distribution

Available with Integrated Thyroid Shield

Pockets Included

Complete Frontal Protection

Velcro Closure for a Comfortable Fit

- Fabric Type -
Satin touch
Smooth • Comfortable • Hygienic

Ideal For

- Fluoroscopy Equipment
- Interventional Radiology Procedures

Available in Tangerine & Royal Blue Color Combination

Customization Options



Name Tag



Embroidery (in Pockets)

**Radiation Protection
Products**

World-Class Radiation Protection Product Range



Thyroid Shield



Head Shield



Eyewear



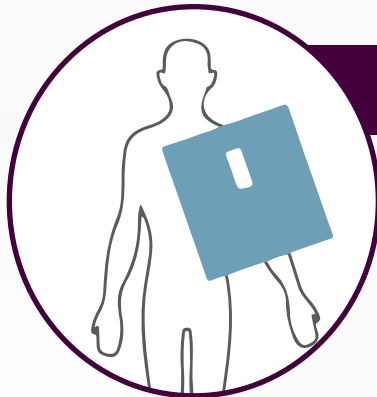
Gloves



Gonad Shield



Ovarian Shield



RadShield



Curtain

**Radiation Protection
Products**

Radiation Protection Products

World-Class Radiation Protection Product Range



Arm Guard



Leg Guard



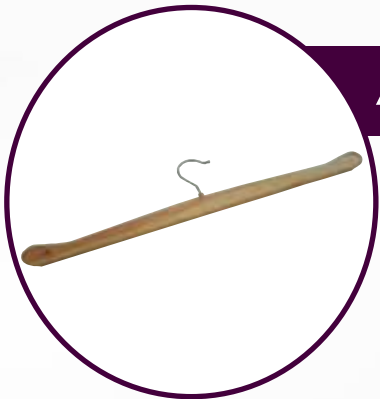
Wall Mounted Racks



Patient Apron



CT Shield



Apron Hanger

Radiation Protection Products



Mobile Storage System

IMAGING ACCESSORIES & COMPONENTS

Anti-Scatter Grids
Image Enhancement Solutions

We at Kiran have spent more than three decades on research and development in the field of X-rays, with a specialty in image enhancement.

With our long-term commitment to research, we have developed outstanding technical expertise in understanding and developing products and processes needed to capture and manage images. We use this special knowledge and experience in the manufacture of our Anti-scatter Grids. These grids address a key ingredient of image quality—contrast—which helps complete the picture in X-ray images.

An ever-evolving and dynamic company, Kiran provides a complete range of anti-scatter grids, which includes Standard Grids, Digital Grids, Bucky Grids, and Circular Grids. We also manufacture customized grids to meet the specialized needs of our customers.

Quality Parameters

Quality control is serious business at Kiran.

Our robust quality management system ensures a stringent testing protocol for incoming raw material and at each production stage for every grid manufactured by us. Statistical Process Control and a rigorous final product testing regimen post manufacture result in defectfree grids with optimal performance.

K Factor is a key performance parameter that measures how efficiently a grid absorbs scattered radiation. With a superior K factor, Kiran grids result in three to four times' better contrast.

B Factor or the Bucky Factor is the quantity of additional X-ray intensity needed with the use of a grid. The lower the B Factor, the higher the quality. Kiran grids employ high quality septa and interspacer coupled with precision assembly, resulting in a low B factor.

Primary Transmission is the ratio of the K Factor to the B Factor (K:B). Kiran grids are designed to allow a transmission of highest possible primary rays.

SNR is the Signal to Noise ratio. Scattered rays generated are several times that of the primary radiation. Kiran grids employ a delicate balance of lead thickness and interspacer to block maximum scatter leading to a higher SNR.

Our grids meet and exceed the specifications laid down by IEC 60627. Kiran grids are CE certified.

Digital Applications

The key to a superior contrast in case of digital applications is to reduce and eliminate the scatter as well as electronic noise.

Such noise generated in all digital systems can be compared with the signal as a ratio—Signal to Noise Ratio—known as SNR. The lower the noise, the higher the image quality.

Kiran grids are designed to improve the SNR in digital systems. Since post processing of a digital image cannot eliminate noise, the scatter has to be eliminated before it enters the digital detector, using a grid.

Customized Solutions

Types	Standard Grids
	Digital Grids
	Bucky Grids
	Circular Grids
Dimensions	Various dimensions covering every size, shape, and profile.
	We also provide grids with custom dimensions.
Line Density	60 lpi (24 l/cm)
	85 lpi (34 l/cm)
	103 lpi (40 l/cm)
	150 lpi (60 l/cm)
	178 lpi (70 l/cm)
	200 lpi (80 l/cm)
Focal Distance	20 inches (50 cm) to 120 inches (300 cm)
Grid Ratio	Parallel grids are also available.
Applications	6:1 to 15:1
	Conventional systems
	Image intensifiers
	Digital systems

Radiographic Cassettes & Screens

Cassettes with perfect film-screen contact with nitrogen-imploded open cell P.U. foam system and a perfectly curved back door profile and textured surface.

Kiran screens are manufactured with an age-defying protective layer that gives them outstanding durability. Our cassettes made with aviation-grade aluminium are made strategically strong to avoid damage from repeated handling at a busy X-ray facility.

Lightweight but with strong corners, locks, and hinges made from the virtually indestructible German Desmopan® polymer and engineering plastics.

Superb image clarity with outstanding product design and precision manufacturing techniques.

Minimum patient dose with optimally balanced formulations.

Screens compatible with all conventional films available in the market.

Cassettes

Kiran cassettes are also available as replacement products in two versions—with and without a Patient ID window.

Grid Cassettes

Kiran Grid Cassettes are available in all popular film sizes and manufactured applying the same superior technology as our standard X-ray cassettes. Our grid cassettes meet the exacting needs of of most of the leading systems available in the market



Screens

Rare Earth: Green Screens

Kiran Rare Earth Green Screens use terbium-activated gadolinium oxy-sulfide phosphor for increased efficiency. They are designed for outstanding contrast, detail perception, and reduction in X-ray dosage with a low mAs.

Range of Green Screens:

Green 400	Speed Class 400	The industry standard—high intensification and excellent detail perceptibility
Green 800	Speed Class 800	Maximum speed for lowest dosage

Also available: Green Screens in Speed Class 100 and 200.

Rare Earth: Blue Screens

Kiran Rare Earth Blue Screens use state-of-the-art rare earth phosphors that lead to extra sharpness, minimum dosage, and reduction in quantum noise. This leads to a phenomenal improvement in the X-ray tube's life span.

Range of Blue Screens

Blue 400	Speed Class 400	The industry standard—high intensification and excellent detail perceptibility
Blue 800	Speed Class 800	Maximum speed for lowest dosage
		Using it with half-speed X-ray film will reduce the system speed to 400

Also available: Blue Screens in Speed Class 100, 200 & 300.

Calcium Tungstate Screens

Kiran Calcium Tungstate Screens use high-quality phosphor possessing exceptional luminescence, resulting in an optimum combination of speed and resolution with minimum mottle.

Range of Calcium Tungstate Screens:

Hi Plus	Speed Class 200	For high resolution and ultra-high speed. Ideal for a wide range of applications.
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Cassettes & Screens

Mammographic Cassettes and Screens

Kiran sources some of the world's best mammo cassettes and screens from Germany.

These cassettes are characterized by tough and lightweight durable engineering plastic, perfect film screen contact due to pneumatic foam, and excellent diagnostic results.

The R Series, including the R 200 and R 300 Mammo Screens, contribute to the high definition obtained with the Mammography System.



Mammographic Cassettes and Screens



DENTAL CASSETTES & SCREENS

Kiran Dental Cassettes are available in sizes 8X10, 13X18, 15X30 & 15X40 with and without patient ID window and manufactured applying the same superior technology as our standard X-ray cassettes. Our dental cassettes meet the exacting needs of extraordinary tolerances built in the mechanisms of most of the leading dental systems available in the market



GRADUAL SCREENS & FLFS CASSETTES

We have specially designed cassettes for full leg, full spine, lumbar spine (lateral), and thoracic spine (lateral). Specially designed for each of these applications, our screens take into account the variations of the human anatomy and positioning within an application. The speed of our gradual screens changes such that a high contrast film can be used.

X - Ray View Box

Slim, Effective and Durable

Viewing Area:

- 1F: 14x17 inches
- 2F: 17x28 inches
- 3F: 17x42 inches
- 4F: 17x56 inches



Features

- Slim Construction (~25 mm Thickness)
- High Brightness: >10,000 lux
- Excellent uniformity of Luminance
- LED Light Source with Life of 1,00,000 Hours
- No UV Emissions
- All 4 Variants are available with Dimmer option (Intensity Controller) and Film Sensor
- Flicker-free Light reduces fatigue to eye
- Available with Wall Mounted/Table Top options

Sonogel

Sonogel Ultrasound Gel is manufactured at Kiran's state-of-the-art factory, where our chemical technologists develop advanced formulations that meet the following critical parameters:

- Transmission of a broad range of frequencies
- Non-irritating formulation that does not harm sonologists or patients
- No damage to transducers
- Slow drying formulation to avoid reapplication and maintain continuity during diagnosis
- Non-staining, non-toxic
- No formaldehyde

Packaging:

- 250 ml collapsible tubes (25 tubes per pack)
- Innovatively designed 5 liter cans with dispensers for ease of use (4 cans per pack)



Contrast Media K-Scan

- 250 ml collapsible tubes (25 tubes per pack)
- Innovatively designed 5 liter cans with dispensers for ease of use (4 cans per pack)

Clinical Particulars

- Neuroradiology
- Angiography
- Digital Subtraction Angiography
- Urology
- Computerized Axial Tomography
- Arthrography
- Fistulography
- Posology
- Neuroradiography

Features

- Water Soluble
- Non Ionic Contrast Medium
- With Diagnostic Efficacy & Safety



Trivitron Care - World-Class Customer Support

Precisely on-time for Enhanced Uptime!

Uptime of your Medical Equipment is important to your Productivity & ROI just as Precision is crucial in delivering the right Clinical Value to your patient. Our range of Service Contracts are tailored to meet your needs, ensuring that your medical equipment is optimally maintained and total cost of ownership is lowered.



For Service Support

Please Call

 **9840080008**

Radiology

Critical Care

Hematology

Pathology

**Molecular
Diagnostics**

**Diagnostic
Sonography**

Biochemistry

Mammography

**Newborn
Screening**

Anatomy

Point of Care

**Turnkey
Projects**