KIRAN

A Division of TRIVITRON Healthcare

BRINGING LIFE TO LIGHT

www.kiranxray.com | www.trivitron.com

Get in Touch!

We look forward to hearing from you.

Kiran Medical Systems, A Division of Trivitron Healthcare
D-117, TTC Industrial Area, Nerul,
Navi Mumbai 400 706
India.

E: kiran@kiranxray.com
E: groupmarketing@trivitron.com
Ph: +91 22 27630942
Fax: +91 22 27671790

www.kiranxray.com | www.trivitron.com

TRIVITRON HEALTHCARE

speaking your language

Kiran Catalogue_01_Rev_04_May 2018

MAKING LIVES

Safer. Healthier. Brighter.

Kiran is a leading manufacturer of Digital and Conventional Radiology solutions with a comprehensive product portfolio covering Radiography, Mammography and Surgical C-Arm Systems, Radiation Protection Products, Accessories and Components for the Radiology Industry.

We at Kiran have spent more than three decades making human life safer, healthier and brighter; manufacturing some of the world's finest, radiation protection products and accessories.

Medical professionals in over 165 countries across the globe trust the Kiran brand for outstanding quality products and unparalleled service standards.

WORLD-CLASS

INNOVATION

GLOBAL

FINEST

KIRAN

R&D

PIONEERS

MEDICAL DEVICES

RADIOLOGY

EQUIPMENT

AFFORDABLE

RADIATION PROTECTION

PRODUCTS

US FDA AND CE

DIGITAL RADIOGRAPHY

IMAGING ACCESSORIES & COMPONENTS

RADIATION PROTECTION PRODUCTS

CERTIFICATIONS & APPROVALS

Our Quality Systems are assessed and certified as per the guidelines of ISO 9001:2008 and ISO 13485:2003 / EN ISO 13485:2012

Our products conform to the stringent quantity norms of CE, as specified by European Council's Medical Device Directive (MDD) contained in 93 / 43 / ECC, as well as Personal Protection Equipment (PPE) contained in 89 /686 / EEC

Most of the Kiran Products meet or exceed EN 61331-1: 2014, EN 61331-3:2014, IEC 61331-1:2014, ASTM F 2547-06, DIN & IS Standards. Our manufacturing facilities are registered with USFDA.

Sterile Radiation Protection Gloves :

Clean room class 100000 ISO 14644-1
Product testing as per new EN / ASTM/ ISO standards:
EN 61331-1:2014
EN 388:2016
EN 455-3 : 2015
EN 420 : 2003+A1:2009
EN 374-2:2014
ASTM F 2547-06

Radiation Protection Apparel

Product testing as per new EN/ASTM/ISO standards:
EN 61331-1:2014
EN 61331-3:2014
EN 14362-1: 2012
ASTM D5035
ISO 105 B02-2014
ISO 3071:2005
ISO 105 BO2-2014
ASTM G21

SAFETY GUARANTEE

Medical Professionals can be assured of maximum protection against scattered radiation when using Kiran protective apparel that are ergonomically designed and lightweight, making it comfortable to wear for long durations. Our lead-free and lightweight range has the same lead equivalence as our leaded range. Available in a range of colors, our apparel adds life to any solemn hospital environment.

Patients who are occasionally exposed to radiation can use Kiran apparel and shields that are not only safe but also have a perfect fit and are comfortable to wear.

When you wear Kiran apparel, you get...

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

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

Your choice of material, colors, size, and embroidered designs

Radiation Protection Products that are stylish & assure protection

Constant innovation in material science have helped Kiran develop some of the finest radiation protection products that offer the highest level of radiation attenuation, is lightweight, ergonomic and aesthetically appealing.

Kiran offers a wide range of radiology products for interventional radiology and cardiology procedures, CT labs, surgery, and general radiology.

Our Testing Facilities

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

R & D Facility

Kiran has its own R&D facility, approved by Department of Scientific and Industrial Research (DSIR), covering upto 100 m^2 of Area.

DOUBLE-SIDED APRON

Available in ZeroLead®, Ultralite® & LeadLite® materials

Lead equivalence
Front: 0.50 mm Pb or 0.35 mm Pb
Back: 0.25 mm Pb

Optima

Frontal overlap of 15 cm

Side slits for better mobility

Velcro panels for improved fit

Adjustable in-built elastic belt for reduced back and shoulder stress

Anti-skid shoulder pads for added comfort and weight distribution

Maxima

Complete frontal overlap for improved fit

Equal protection on both shoulder panels

Wide adjustable elastic belt for reduced back and shoulder stress

Side slit fastener to prevent accidental radiation exposure

SKIRT & VEST

Available in ZeroLead®, Ultralite® & LeadLite® materials

Lead equivalence:
Front : 0.50 mm Pb or 0.35 mm Pb
Back : 0.25 mm Pb

Optima

Adjustable Velcro panels for a snug fit

Fully overlapping skirt for added lower body protection

Vest overlaps skirt up to 15 cm for additional lower body protection

Equitable weight distribution on waist and shoulders to prevent fatigue

Maxima

Front opening for ease of wearing

Available in magnetic lock

Complete upper body protection with fully overlapping vest

Equitable weight distribution on waist and shoulders to prevent fatigue

COAT APRON

Complete frontal protection

The ideal choice for short durations

Padded shoulders for reduced shoulder stress and equitable distribution of weight

Available in ZeroLead®, Ultralite® & LeadLite® materials

Lead equivalence:
Front : 0.50 mm Pb, 0.35 mm Pb & 0.25 mm Pb

Easy to wear and remove

Available with thyroid attached option

Wide stretchable insert with Velcro fastening for a snug fit

SURGICAL APRON

The exclusive design for surgeons

Specially designed for the surgical theater

Easily slides out from under a surgeon's scrubs when discarding

Available in ZeroLead®, Ultralite® & LeadLite® materials

Lead equivalence:
Front : 0.50 mm Pb, 0.35 mm Pb & 0.25 mm Pb

Maximum frontal protection

Adjustable Velcro panels for improved fit

Ergonomic design equitably distributes weight

THYROID SHIELD

Classic

All-time popular design
Wide coverage area
One size fits all

Elegant

Adjustable fastener
Easily attaches to our Double Sided Apron and Vest

Slimline

Provides perfect fit and protection
Easily attaches to all Aprons

Harmony

Collar design perfectly fits thyroid gland
Wide coverage

PROTECTIVE SHIELDS

Head Shield

Complete protection to head and ears
Flexible and supple
Designed for ease of wear and removal
Size : Adult & Child
Lead equivalence: 0.25 mm Pb, 0.35 mm Pb, 0.50 mm Pb, 1.00 mm Pb

Ovarian Shield

Ideal to protect the female reproductive organ
Available in one-size-fits-all size and child size
Designed for ease of wear and removal
Adjustable belt for good fit
Size : Adult & Child
Lead equivalence: 1.00 mm Pb

Gonad Shield

Ideal to protect the male reproductive organ
Available in one-size-fits-all size and child size
Designed for ease of wear and removal
Adjustable Velcro panels for good fit
Lead equivalence: 0.50 mm Pb, 1.00 mm Pb

PROTECTIVE SHIELDS

Patient Apron

A colorful range of aprons for patients of all size

Universal-use as gonad and ovarian shields

Complete lower body protection

Designed for ease of wearing

Adjustable back strap for a snug fit

Available with & without belt

Available in ZeroLead®, Ultralite® & LeadLite® materials

Lead equivalence:
Front : 1.00 mm Pb, 0.50 mm Pb or 0.35 mm Pb

Aprons for Children

Getting an X-ray is comfortable and friendly even for children with just a little bit of help from us

Our children's range of aprons feature colorful prints, lightweight materials, and ergonomic designs in various child sizes

PROTECTIVE SHIELDS

Panoramic Design

Designed for being X-rayed at the Panoramic X-ray machine

Provides Optimum Protection

Available in ZeroLead®, Ultralite® & LeadLite® materials

Lead equivalence:
Front : 0.50 mm Pb, 0.35 mm Pb & 0.25 mm Pb

Dental Apron

Designed for complete protection while being X-rayed in a dentist's chair.

THE SECRET INGREDIENTS

With Kiran apparel, there is never any compromise on quality. Our range is made from proprietary materials, each designed for specialized purposes. Ask for apparel in the material that best suits your needs.

Zero Lead®: An eco-friendly technological breakthrough

Kiran fulfills its promise of being a socially responsible company with the development of Zero Lead®, an eco-friendly apparel that replaces lead with a combination of bismuth and antimony. This sheeting not only provides the same protection as leaded sheeting but is also significantly lighter. This masterpiece of Kiran's innovation has been extensively documented in European and American scientific journals.

Ultralite®: An Optimised weight sheeting

Our most popular sheeting brand, Ultralite® is a weight-optimized sheeting that replaces a large part of lead with antimony. Ultralite® sheeting provides the same level of protection as leaded sheeting, but at a significantly lower weight. Ultralite® sheeting is ideal for cath labs and intensive surgeries requiring protection apparel to be worn for long periods of time.

Leadlite®: The industry standard redefined

Our latest innovation, Leadlite® is a proprietary leaded sheeting that is the lightest leaded material. This breakthrough in weight optimization is a result of the purest and finest lead particles used together with mineral oils and minimum bonding materials instead of artificial plasticizers. Our special formulation ensures that the material remains supple for several years and is resistant to humidity.

Hygiena : The ultimate health fabric

Kiran's range of apparel has a longer shelf life thanks to our proprietary Hygiena covering material that prevents fading and wrinkles. Hygiena is a health fabric that is resistant to blood stains and is both water and stain resistant. Hygiena is carefully crafted in Italy and is completely breathable.

SatinTouch : A Brand new Innovation

Advanced fabric that incorporates all the benefits of the Hygenia fabric while offering a super smooth satin like feel, making it extremely comfortable to wear over long durations.

% ATTENUATION

Test Sample: Radiation Protection Apron (Leadlite, Ultralite & Zerolead)
Tests parameters
Focal distance – 110 CM
Beam Geometry – Narrow
Filtration – 0.25 mm Cu
Test Standard – ASTM F 2547-06

Leadlite

Lead equivalence (mm Pb)	Area Density Kg/Sqm	@60kV	@70kV	@80kV	@90kV	@100kV	@110kV	@117kV	@125kV
		% Attenuation(EN 61331-1:2014)							
0.25	3.2 - 3.5	98.5	97.0	92.5	90.4	93.6	75.9	75.6	75.6
0.35	4.8 - 5.3	99	98.3	96.1	94.5	92.7	90.9	90.1	82.3
0.50	6.4 - 7.0	99	99	97.8	96.8	95.6	94.4	93.9	93.2

Ultralite

Lead equivalence (mm Pb)	Area Density Kg/Sqm	@60kV	@70kV	@80kV	@90kV	@100kV	@110kV	@117kV	@125kV
		% Attenuation(EN 61331-1:2014)							
0.25	2.9 - 3.1	97.9	96.2	92.2	89.9	75.1	74.4	74	73.8
0.35	4.4 - 4.8	99	98.3	96.2	94.7	92.9	90.6	89	80.8
0.50	5.8 - 6.2	99	99	97.9	96.8	95.8	94.3	93	92.6

Zero Lead

Lead equivalence (mm Pb)	Area Density Kg/Sqm	@60kV	@70kV	@80kV	@90kV	@100kV	@110kV	@117kV	@125kV
		% Attenuation(EN 61331-1:2014)							
0.25	2.7 - 2.9	97.7	96.1	91.6	72.9	74.2	74.1	73.5	63.6
0.35	4.1 - 4.5	99	91.2	96.2	94.7	93	90.7	81	81
0.50	5.4 - 5.8	99	99	97.8	96.6	95.4	93.9	92.8	91.9

KIRAN BESPOKE

Most of our products can be customized in terms of size, color, and embroidery patterns.

Sizes

All apparel is available in made-to-order sizes for that perfect fit. Follow the measurement guidelines below when sending us your orders.

How To Measure:

Apron

<Chest Waist Hips Length>

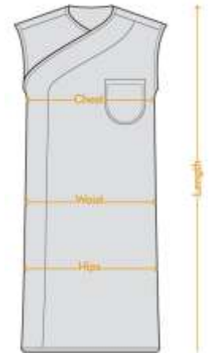
Length of the apron is measured from the mid-point of the shoulder to the knees

Skirt & Vest:

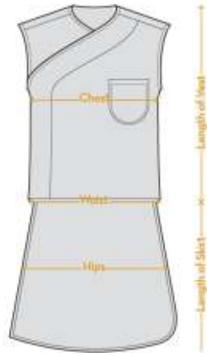
<Chest Waist Hips Length of Vest Length of Skirt>

Length of the vest is measured from the mid-point of the shoulder to the waist
Length of the skirt is measured from waist to knees
Chest measurement is the distance between the two underarms
Girth is the circumference of the chest measured by wrapping the tape around the torso just below the arm pits
For custom orders, please provide measurements of the chest, waist, hips, length, and girth.

Apron



Skirt & Vest



Embroidery

Embroider the name of a medical professional, department, or hospital on a detachable strip that snaps onto all our apparel.

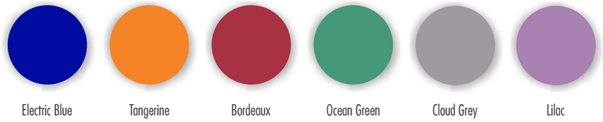
You can also choose from our range of embroidery designs, which can be added to the front or to the pockets of your apparel, to add that personal touch to your healthcare facility.
you work in a pediatric facility, you can opt for an embroidery pattern to be added to your apparel. These are just some examples from our vast library of designs.

Colors

All Kiran apparel can be ordered in any of our wide range of colors. Choose one that best represents the personality of your medical facility!

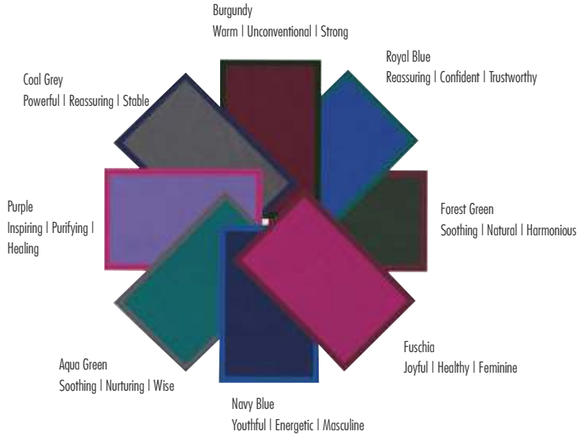
Each color is accompanied with piping in a complementary color.

SatinTouch Shades



Electric Blue | Tangerine | Bordeaux | Ocean Green | Cloud Grey | Lilac

Hygiena Shades



PROTECTIVE GLOVES

Kiran protective gloves are a must when hands are in the active beam field, for instance, during radioscopy procedures.

Made of soft, pliable material, Kiran gloves are non-sterile, protective, comfortable, and usable.

DUO

Our dual-layered gloves have a seamless external covering and an internal lining, all of which can be dismantled and cleaned.

Lead equivalence: 0.50 mm Pb

Lead Equivalent thickness in mm Pb	Available Size	length of the glove in cm	Half circumference of the glove on cuff / palm in cm	Half circumference of the hand of the user in cm
0.50	L	38	18.5 / 14	9

MITTENS

One of our best-sellers, this model allows wearers the mobility of using their bare hands directly in the beam field, thanks to the protective mitten design and snug internal strap.

Lead equivalence: 0.25 mm Pb, 0.35 mm Pb, and 0.50 mm Pb

Lead Equivalent thickness in mm Pb	Available Size	length of the glove in cm	Half circumference of the glove on cuff / palm in cm	Half circumference of the hand of the user in cm
0.25	L	38	18.5 / 14	9
0.35	L	38	18.5 / 14	9
0.50	L	38	18.5 / 14	9

Available in ZeroLead®, Ultralite® & LeadLite® materials

LEAD-FREE Radiation Protection HI-GRIP GLOVE

360-Degree Lead-Free Protection

Elite designing apparel for intervention radiological and cardiological procedures, surgery, CT scans, and general radiology.

The hands usually find themselves exposed to scattered radiation and under a direct beam during surgical procedures.

Our latest innovation is an unmatched range of sterile lead-free and disposable radiation protection gloves that provide the highest possible protection and are easy to dispose off in an eco-friendly manner.

CATHLAB PRO

MAX

LATEX-FREE

Specifications

Size	Minimum Length (mm/inches)	Palm Width (mm/inches)
6	280/11.0	78/3.1
6.5	280/11.0	80/3.1
7	280/11.0	85/3.3
7.5	285/11.2	94/3.7
8	285/11.2	100/3.9
8.5	290/11.4	107/4.2
9	290/11.4	114/4.5

Attenuation measurement at broad beam according to EN 61331-1 : 2014 / ASTM-2547-06.
Setting for lead equivalence: 60 kV, 2.5 Al filter, narrow beam.

Radiation Beam Energy Level	Skin Dose Reduction				
	Max NXPG35	Thin NXPG25	Ultrathin NXPG20	Cathlab Pro CNXPG20	Latex-free SXPG20
60 kV	63%	52%	46%	40%	46%
80 kV	52%	43%	40%	35%	40%
90 kV	48%	40%	38%	32%	38%
100 kV	44%	36%	31%	27%	31%
120 kV	38%	27%	26%	25%	26%
Lead Equivalence at 60 kV	0.04	0.025	0.02	0.02	0.02

Characteristics

Technical Parameters	Max NXPG35	Thin NXPG25	Ultrathin NXPG20	Cathlab Pro CNXPG20	Latex-free SXPG20
Finger tip thickness (mm/mils)	Min. 0.35	Min. 0.25	Min. 0.2	Min. 0.20	Min. 0.25
Palm thickness (mm/mils)	Min. 0.32	Min. 0.24	Min. 0.19	Min. 0.19	Min. 0.24
Cuff thickness (mm/mils)	Min. 0.3	Min. 0.22	Min. 0.18	Min. 0.18	Min. 0.22
Lead equivalence (mm Pb)	Min. 0.04	Min. 0.025	Min. 0.02	Min. 0.02	Min. 0.025
Color	Khaki	Khaki	Light cream	Light cream	Khaki
Material	Natural Latex with hypoallergenic inner coating				Synthetic Latex
Tensile strength (MPa)	Min 14				
Minimum elongation (%)	700				
Protective material	Mixture of lead-free elements				
Donning agent	Powder free				
Azo dyes	None				
Residual powder	≤ 2mg/glove				
Protein content	Less than 50 micrograms/gram				
Sterilization	Gamma sterilization				
Packing	One sterile pair per pouch				
Storage	Store in cool, dry place away from Ozone (Below 25° C) 40-50% RH				

EYE PROTECTION

The Kiran range of eyewear is specially designed to protect the sensitive human eye from the harmful effects of radiation. With complete protection to the entire eye, we ensure that our eyewear never exposes Surgeons, Doctors and X-ray technicians to accidental radiation.

Lead equivalence: Minimum 0.75 mm Pb at 150 kVp according to standard Narrow Beam Geometry EN 61331-1 : 2014 & EN 61331-3 : 2014

LIGHT AND COMFORTABLE
Ease of wearing for long durations

EUROPEAN LEAD GLASS
Absorbs 99% radiation

WIDE RANGE OF MODELS
Designed for differing applications

CE
0120

EYE PROTECTION

Front
Perfect frontal protection

Front & Side
Protection from frontal as well as lateral radiation

Fit Over
Fits perfectly over the wearer's existing eyeglasses

Max 10
Protection and comfort with padding for the temples and bridge of the nose

Aviators
Wraparound style eyeglasses with Protection and stylish design

Max 30
Unisex Model that fits all faces and shapes

STORAGE SYSTEMS

Poor storage reduces the shelf life of protective apparel and also takes up excessive space. Our perfectly crafted range of storage systems can help safely store multiple pairs of apparel and accessories in a compact unit that is space efficient and easy to install and comes in stainless steel grade.

Mobile Storage System with Hangers

Convenient mobile storage system with brakes
Stainless steel hangers for hygienic storage
Compact unit for storing apparel, gloves, and shields
Detachable hooks for more storage options

Available models:
5 Hangers & Glove Holder: Stores up to 5 pairs of apparel
10 Hangers & Glove Holder: Stores up to 10 pairs of apparel

Glove holder and hooks are available for fixing on the mobile system

Mounted Wall Racks

Swivel hangers for ease of hanging and removing
Stainless steel hangers for hygienic storage
Space-saving racks store apparel close to a wall
Wall bracket can be right or left sided for optimum use of space

Available models:
Wall Racks with One, Two, Three and Five hangers

Hooks are available for fixing on all wall racks.

CE

CT SHIELD

It has been found that radiation doses equivalent to those received during CT scans lead to an increased incidence of cancer. The Kiran CT Shield is designed to protect from radiation doses emitted during CT scans, without any compromise to image quality

Lead Equivalence: Minimum 0.07 mm Pb at 150kV, 2.5 mm Al filter at Narrow Beam condition according to EN 61331-1: 2014

CT Breast Shield

Today, cancer is affecting younger and younger populations of women, with the highest risk being to women under the age of 35. CT scans and similar doses of radiation increase cancer risk, making it essential to conduct research on new radiation protection methods. Kiran applied its expertise in radiation protection to develop the Breast Shield that uses in-plane breast shielding to reduce cancer risk.

Offers 67% protection to the sensitive tissues of the breasts
Helps prevent breast cancer
Various sizes available

CT Pediatric Shield

It has been found that radiation doses equivalent to those received during CT scans lead to an increased incidence of cancer. Infants are ten times more susceptible to carcinogenesis caused by radiation exposure than adults. The Kiran Pediatric Shield is designed to protect infants and children from radiation doses emitted during CT scans, without any compromise to image quality.

Offers 67% protection
Available with foam pad
Available in 3 sizes

CT Eye Shield

Designed to protect the eye, which becomes especially sensitive to radiation after repeated CT procedures.

70% protection to the complete eye
Designed to mould to the eye's shape
One size fits all

CT Thyroid Shield:

Designed to provide special protection to the sensitive thyroid gland.

Offers 65% protection to the thyroid gland
Prevents tissue damage
One size fits all

CE
0120

RADSHIELD

Sterile Incise Drape with Radiation Protection

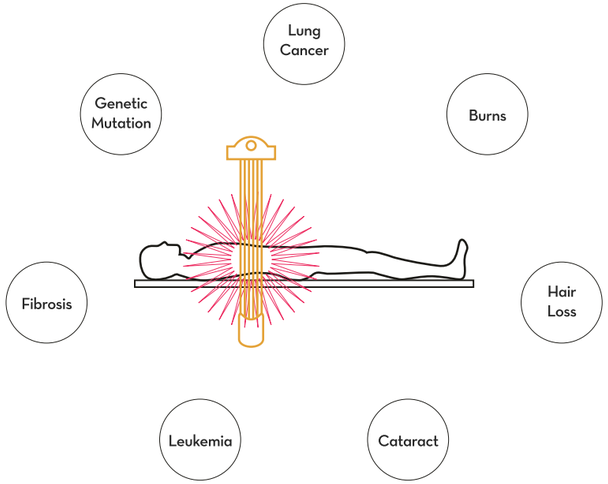
Perfect Scatter Protection

An Interventional Physician is exposed to radiation 15-20 times a day and X-ray radiation is known to be a Carcinogenic. Research and studies have shown continuous exposure can result in Cancer of the lung, brain, thyroid, breast, fibrosis and hair loss.

Our latest inclusion, Radiation Protection Shields (Rad Shields) are made from proprietary mix of several Lead-free elements, which help prevent cancer risks and radiation damage.

Why Rad Shield?

Continuous X- Ray radiation exposure eventually affects the physician



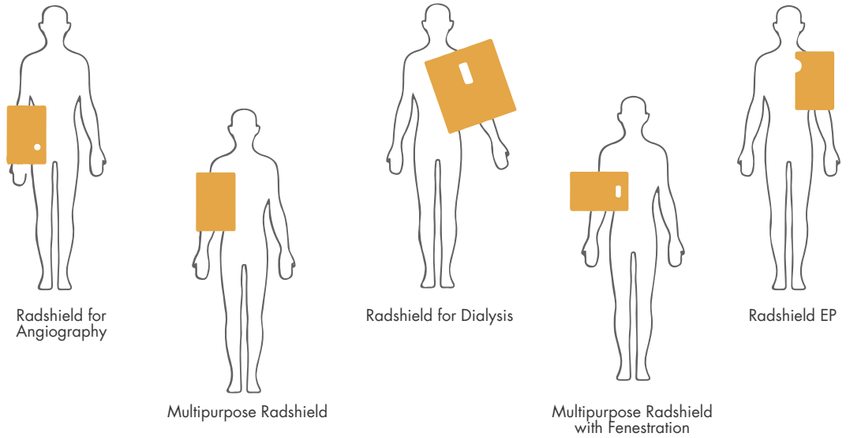
CE
0120

Equivalence (mm Pb)	Type	Attenuation 90 kVp(As Per ASTM F 2547-06)
0.125	LOW (L)	75.3%
0.250	MEDIUM (M)	90.8%
0.350	HIGH (H)	95.3%

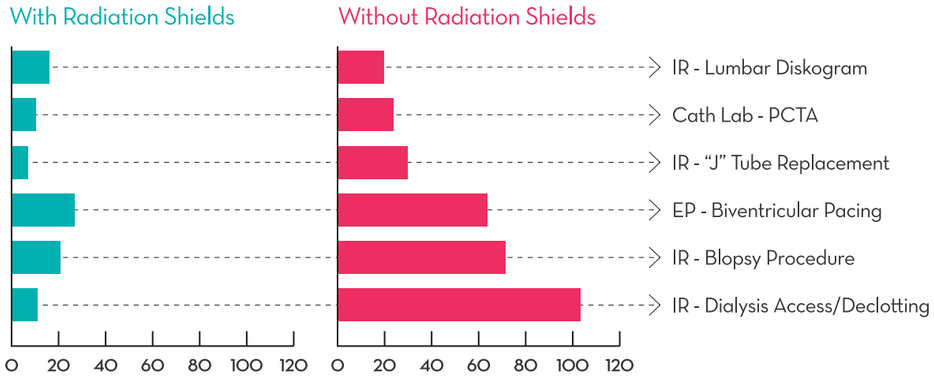
How & Where?

Rad Shields are placed on the patient, in such a way that, the Physician gets protection from X-ray scatter radiation. Rad Shields are designed to allow the Physician to Conduct his surgery without any hindrance but at the same time provide protection to him. Rad Shields are used for general as well as interventional procedures such as biopsy, femoral entry angiography and many others.

The Rad Shield Solution



Typical Scatter Radiation Exposure Levels



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 defect-free 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.

CE

DIGITAL APPLICATION

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)
	Parallel grids are also available.
Grid Ratio	6:1 to 15:1
Applications	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

CE

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 intensification with 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.

Also available: Calcium Tungstate Screens in Speed class 100 (medium) and 150 (hi-speed).

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.

SPECIAL PURPOSE PRODUCTS

KIRAN FILM

A universal film with high contrast in the low densities to ensure sharp and detailed images.
Green or Blue-sensitive film, suited for a complete range of Radiology applications.

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.

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)

CE

CONTRAST MEDIA K-Scan

The Trusted Radiology Specialists Offers
K-SCAN, IOPAMIDOL Injection

Clinical Particulars

Neuroradiology
Angiography
Digital Substraction Angiography
Urology
Computerized Axial Tomography
Arthrography
Fistulography
Posology
Neuroradiography

Features

Water Soluble
Non Ionic Contrast Medium
With Diagnostic Efficacy & Safety

Concentration		Ph	Viscosity (mPa.s)		Density		Osmolality (Mosm/g) 37°C	Osmolality Pressure (atm.) 37°C
Iodine (mg/ml)	Iopamidol (g/100ml)		20°C	37°C	20°C	37°C		
300	61.2	7+0.5	88	4.7	1.335	1.328	0.62	15.7
370	75.5	7+0.5	20.9	9.4	1.415	1.405	0.8	20.3

MEDICAL
EQUIPMENT

SURGICAL C-ARM SYSTEM

Mobility in a compact design with intuitive positioning
Image acquisition-processing-management-storage

Features

40 KHz x-ray generator with 3.5 KW and 5 KW output power options with stationary and rotating anode tubes

Minimum radiation dose requirement with selection of tailored fluoroscopy modes

Pulsed Fluoroscopy

Low Dose Fluoroscopy

Boost Fluoroscopy

Single Shot Fluoroscopy

CE
0120

Functionality

The C-arm features an intuitive software for convenient selection from multiple configurations

Real time image rotation and image capture

Accurate & reliable operations

High resolution image capture

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

12˚ on each side C-Arm swiveling with manual brake for locking

Orbital Movement : 125˚
Free Space : 780mm
SID : 980mm

Technical Specifications

KEY FEATURES	ELITE RA	ELITE 1K X 1K	ELITE 1K X 1K-DSA
OUTPUT POWER	5.0kW	5.0kW	5.0kW
TUBE CURRENT	12.0mA	12.0mA	12.0mA
kV (max.)	120kV	120kV	120kV
IMAGING RESOLUTION	CCD-752 X 582 pixels	1K X 1K	1K X 1K
MONITOR	17" LCD	19" LED Medical Grade	19' LED Medical Grade
FIELD OF VIEW	23cm/9"	23cm/9"	23cm/9"
FREE SPACE	82 cm	82 cm	82 cm
IMMERSION DEPTH	68 cm	68 cm	68 cm
ORBITAL MOVEMENT	125°	125°	125°
	(90° to -35°)	(90° to -35°)	(90° to -35°)
SPATIAL RESOLUTION	≥ 1.4 lp/mm	≥ 2.2lp/mm	≥ 2.2lp/mm
IMAGE STORAGE	Stand alone- storage up to 100 images	PC Based Memory-Image storage depends on HD	PC Based Memory- Image storage depends on HD
PORTABILITY OF IMAGE	USB drive, LAN connectivity	USB drive, LAN connectivity & CD writer	USB drive, LAN connectivity & CD writer

Technical Specifications

KEY FEATURES	INFINITY SA	INFINTY SA HD	INFINITY SA 1K X 1K
OUTPUT POWER	3.5kW	3.5kW	3.5kW
TUBE CURRENT	8.0mA	8.0mA	8.0mA
KV (max.)	110kV	110kV	110kV
IMAGING RESOLUTION	CCD-752 X 582 pixels	CCD-752 X 582 pixels	1K X 1K
MONITOR	17'' LCD	32" HD	19" LED Medical Grade
FIELD OF VIEW	23cm/9"	23cm/9"	23cm/9"
FREE SPACE	82 cm	82 cm	82 cm
IMMERSION DEPTH	68 cm	68 cm	68 cm
ORBITAL MOVEMENT	125°	125°	125°
	(90° to -35°)	(90° to -35°)	(90° to -35°)
SPATIAL RESOLUTION	≥ 1.2lp/mm	≥ 1.4 lp/mm	≥ 2.2 lp/mm
IMAGE STORAGE	Stand alone- storage up to 100 images	Stand alone- storage up to 1000 images	PC Based Memory- Image storage depends on HD
PORTABILITY OF IMAGE	USB Drive	USB Drive and LAN Connectivity	USB drive, LAN connectivity & CD writer

ULTISYS – RADIOGRAPHY SYSTEM

- Versatile system with wide clinical applications
- Flexibility to cover full body examination without patient repositioning
- Intuitive control console with Integrated Graphical Display APR (Anatomical Programming) and Optional AEC (Automatic Exposure Control)
- Ergonomic design, convenient to use
- Scalability with a wide range of X-ray generators adaptable to specific application and system configuration
- Radiographs of standing and supine patients including patients on wheelchairs and stretchers
- Easily upgradable to full Digital Radiography System

CE

4 WAY FLOATING TABLE

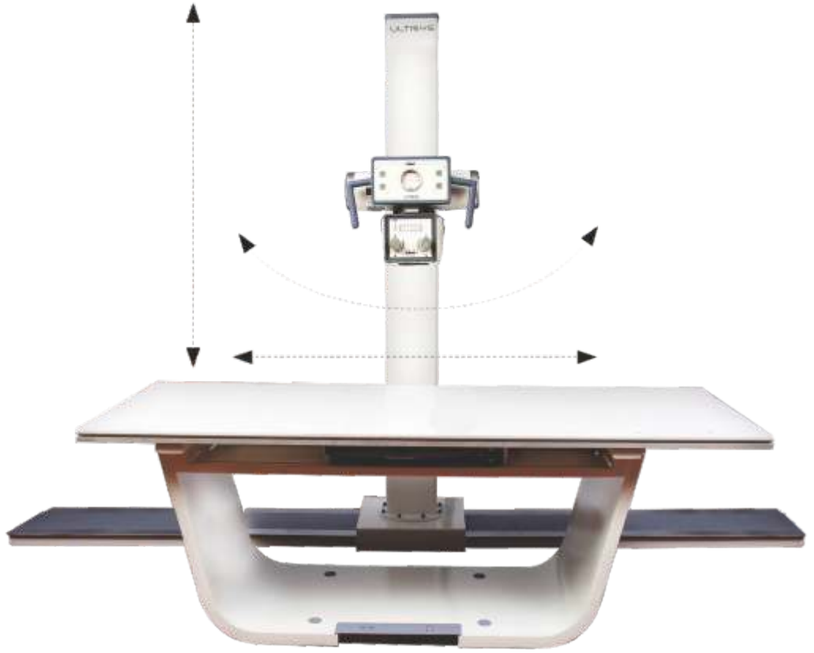


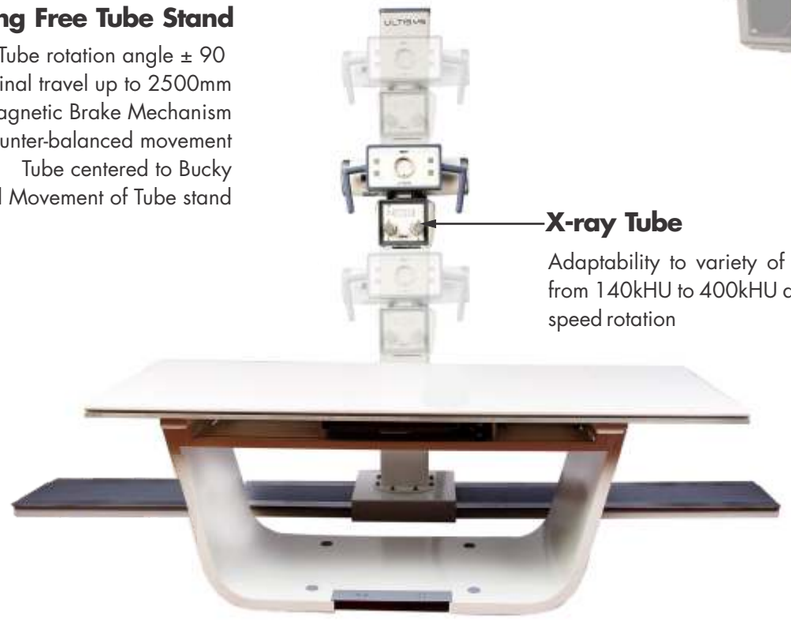
Table Top Specifications	L : 2180mm x W : 890mm x H : 760mm
	Filtration 1.2mmAl
	Max. Patient Weight 300kg Upgradable to 400 kg
Bucky type	Oscillating bucky with integrated High Density Grid.
Brake Mechanism	Electro-Magnetic (Longitudinal and Transverse movement)
Anit Scatter Grid	Ratio 10:1, 103 LPI, 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

Celling Free Tube Stand

Tube rotation angle ± 90
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

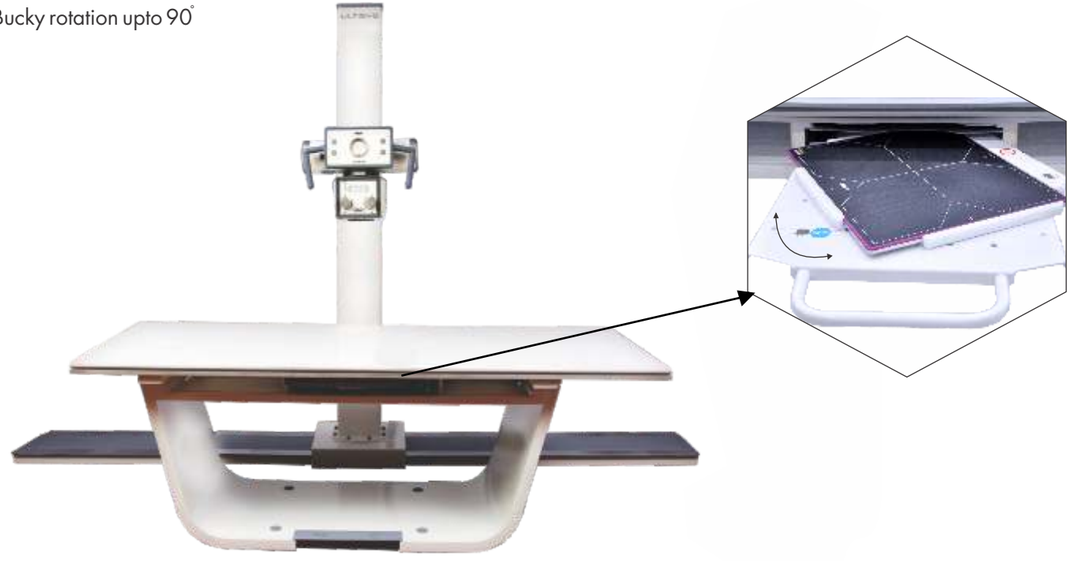
Adaptability to variety of X-ray tubes ranging from 140kHU to 400kHU and Low/High anode speed rotation

GENERATOR OPTIONS

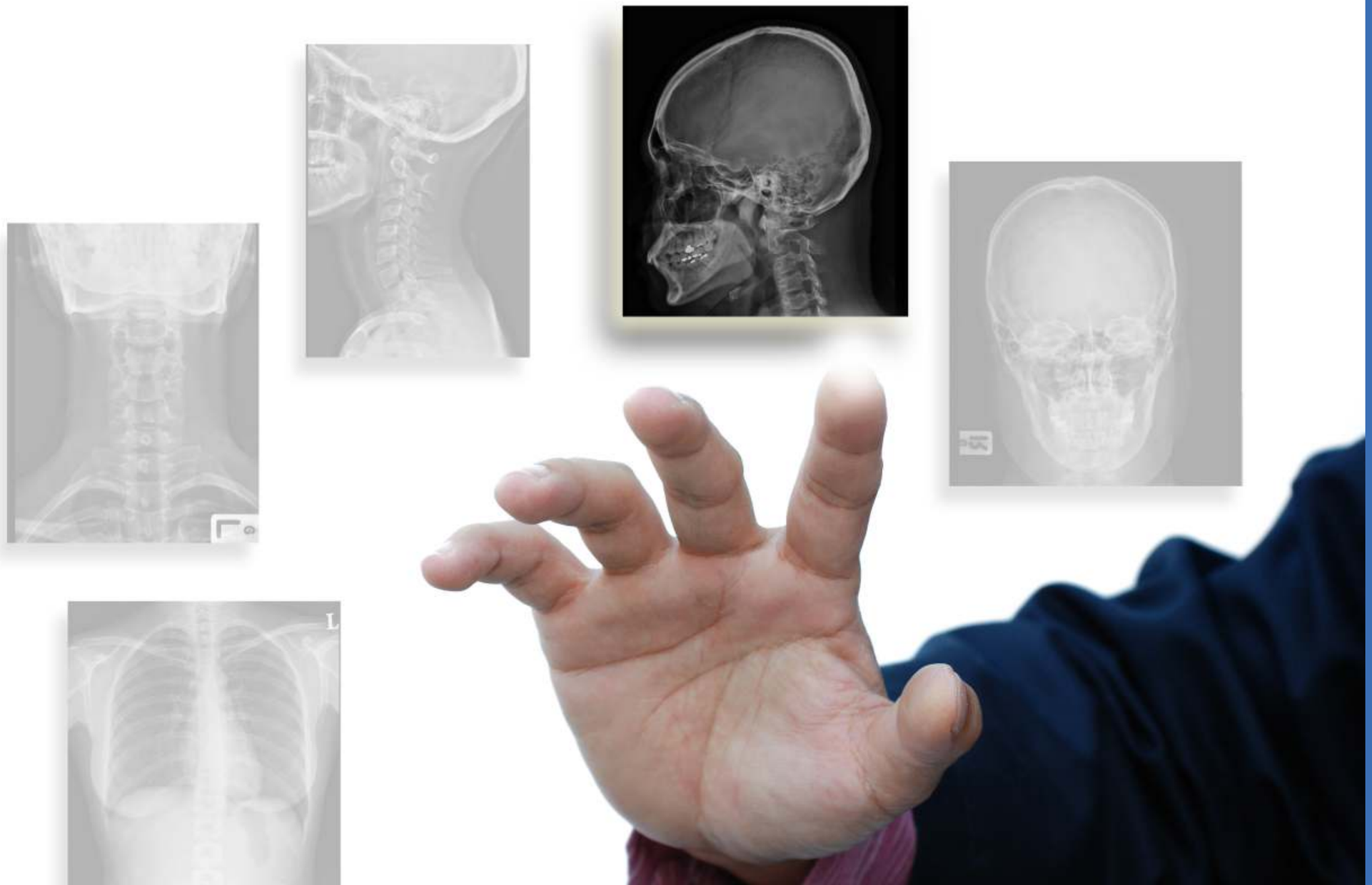
Output Rating	20kW	32kW	40kW	52kW	68kW	82kW
kV Range	40-125kv	40-125kv	40-125kV	40-150kV	40-150kV	40-150kV
mA Range	10-250mA	10-400mA	10-500mA	10-640mA	10-800mA	10-1000mA
mAs Range	0.1 - 500mAs	0.1-500mAs	0.1-500mAs	0.1-500mAs	0.1-500mAs	0.1-500mAs
Maximum Output Power	250mA@80kV	400mA@80kV	500mA@80kV	640mA@81kV	800mA@85kV	1000mA@82kV
	200mA@100kV	320mA@100kV	400mA@100kV	500mA@104kV	640mA@106kV	800mA@102kV
	160mA@125kV	250mA@125kV	320mA@125kV	400mA@130kV	500mA@136kV	640mA@128kV
				320mA@150kV	400mA@150kV	500mA@150kV
Leakage Radiation	<2mR/hr	<2mR/hr	<2mR/hr	<2mR/hr	<2mR/hr	<2mR/hr

ROTATING BUCKY

Bucky rotation upto 90°



DIGITAL RADIOGRAPHY



KIRAN ULTISYS DIGITAL RADIOGRAPHY

FLAT PANEL DETECTOR

Wi-Fi
Wireless Acquistion & Transfer

Scintillator
Direct Deposit CsI:TI

Digital Retina Technology
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%

CE

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

Wireless detector with WiFi enabled system
Ease of sharing DR solution across multiple X-ray systems
Light weight and slim design with built-in foldable handle
14" x 17" cassette-sized wireless detector
Extra-long battery life with 1400 shots and 7 hours 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

Technical Specifications

Sensor	
Scintillator	Direct Deposit CsI : TI
Active Area	433.7 x 354.8mm
Pixel Array	2816 x 2304
Pixel Pitch	154 µm
Communication Interface	
Communication Interface	Gigabit Ethernet 2.4/5 GHz, 300Mbps
Image Acquisition Time	2-3s (wired) 4-5s (wireless)
Exposure Control	F²AED Manual Sync
Environmental	
Operating Temperature Range	5-35°C
Humidity Range (Non-condensing)	30%-75% RH
Storage Temperature Range	-20-55°C
Humidity Range	10%-90% RH
Mechanical	
Dimensions	460 X 384 X 15mm (18.11" X 15.11" X 0.59")
Weight	3.7 Kg (8.16 lbs.)
Housing Material	Carbon Fiber Front High Strength Aluminum Alloy Back
Power	
Power Dissipation	8W (Standby) 20W (Operating)
Power Supply	100-240V AC

DIAGNOSTIC MEDICAL MONITOR

DICOM IMAGES WITH HIGH ACCURACY

Features

Display Size : 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