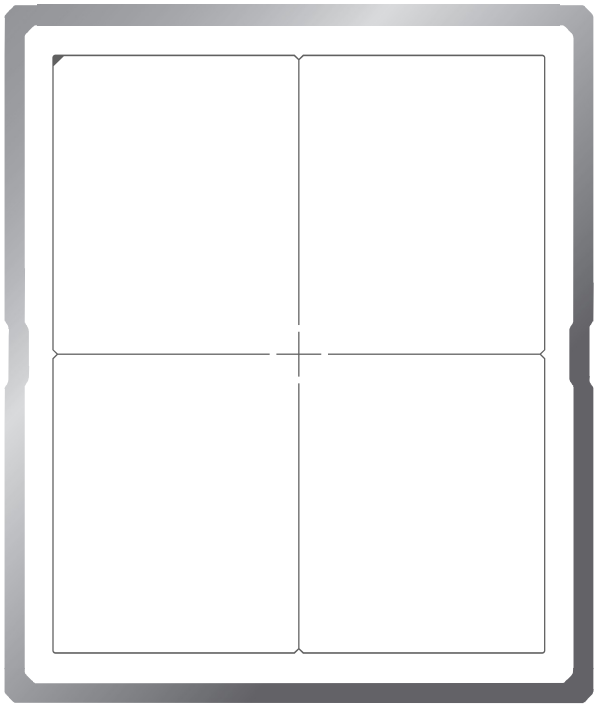
VIEW it now. You will know.

VIVIX-S V series



vieworks

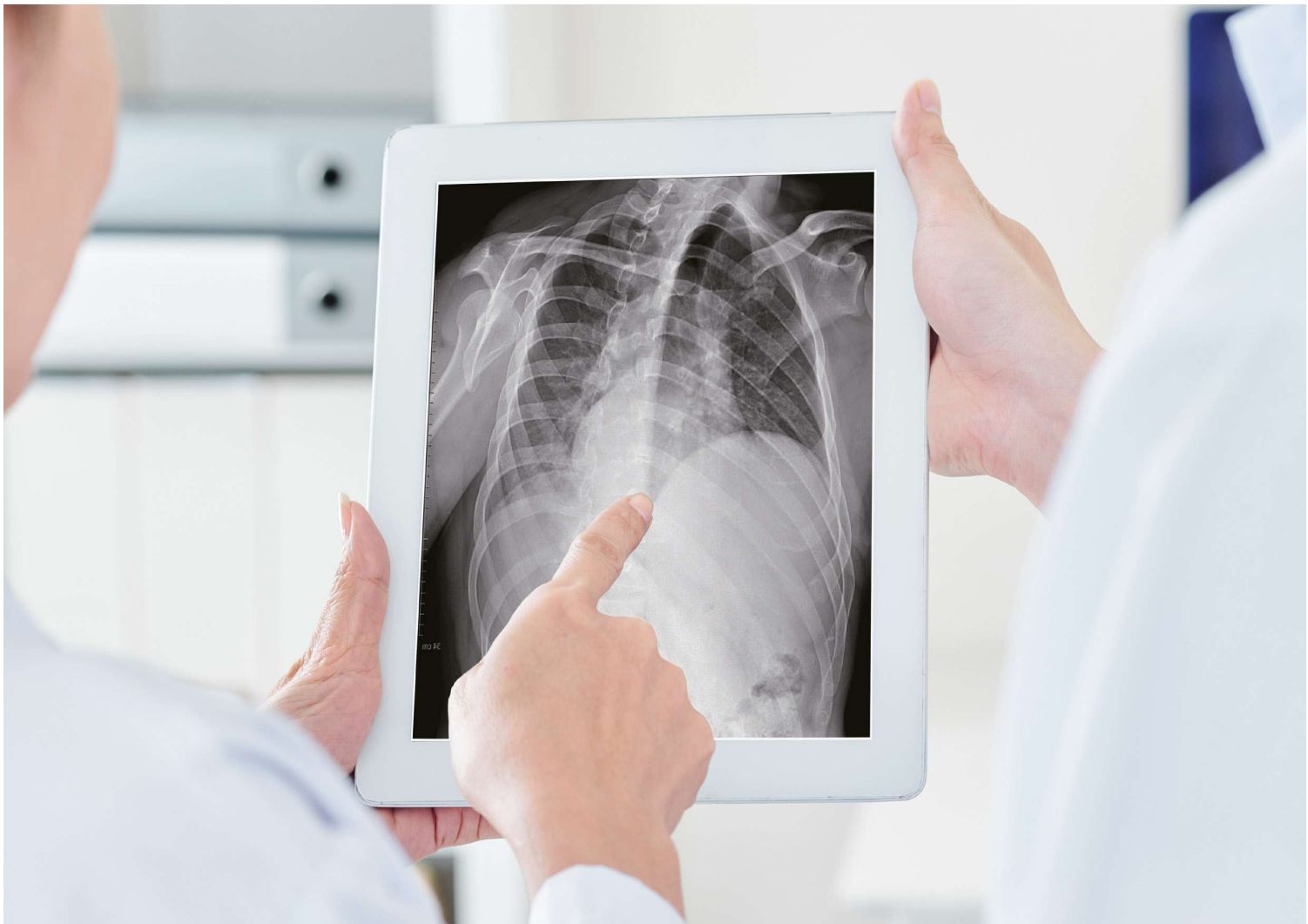
OVERVIEW

VIVIX-S V series is the most appropriate DR detector with advanced technology and a beautiful design to make the work environment more pleasant. The cassette-sized DR detector is offered in 3 sizes – 25x30cm (VIVIX-S 2530VW), 36x43cm (VIVIX-S 3643VW), and 43x43cm (VIVIX-S 4343VW).

As competition in the DR imaging market is getting furious, the market is overflowing with similar detectors in terms of specifications and prices. But are DR detectors the best possible choice for you? To meet your high expectations, Vieworks has refreshed its DR detector lineup to provide a solution that fits you perfectly.

VIVIX-S series gained a reputation as a retrofit total solution by offering high-performance detectors and integrated software in packages. With market-proven technology and ceaseless innovation, Vieworks launched the VIVIX-S V series, a strategic model that will open up a new era of digital radiography. The new series will be the most appropriate choice in regard to workflow, quality, and economics by supporting high-quality patient care in the rapidly changing medical environment.

VIEW it now. And you will know it.



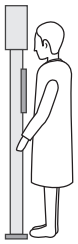
DESIGN AWARD 2020

VIVIX

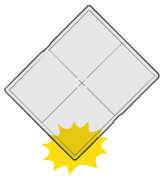
VIVIX-S V series

View it now. You will know.

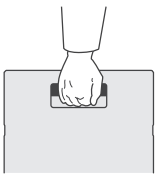
The most appropriate choice you can make.



Optimal Solution
for Diagnostic Practice



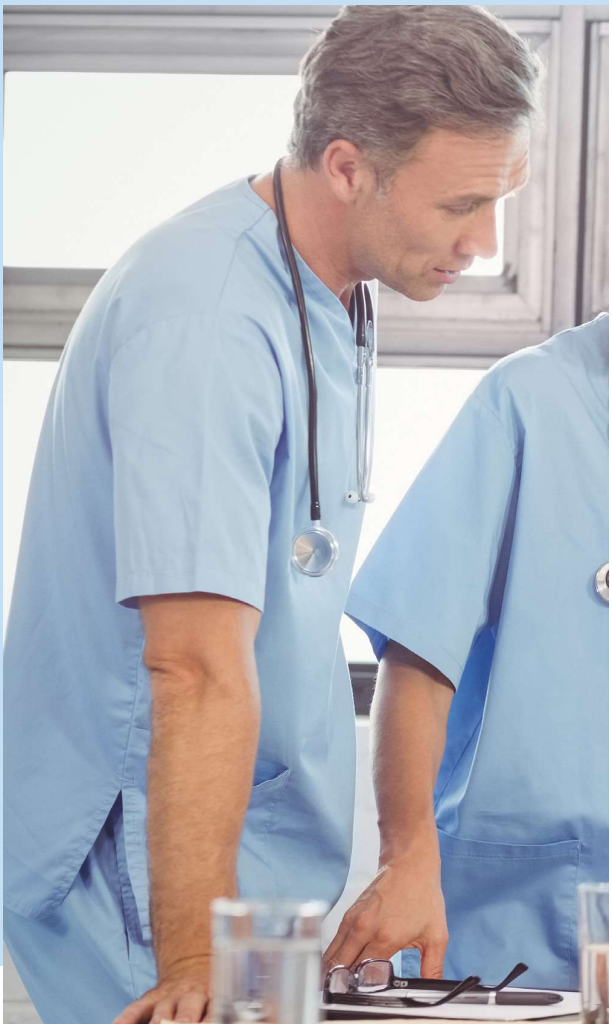
Excellent
Durability



Real Mobility

Optimal Solution for Diagnostic Practice

Do not lower the image quality and working speed due to budget constraints. VIVIX-S V series is a cost-effective total solution based on Vieworks' years of medical imaging device development experience and state-of-the-art imaging technology.



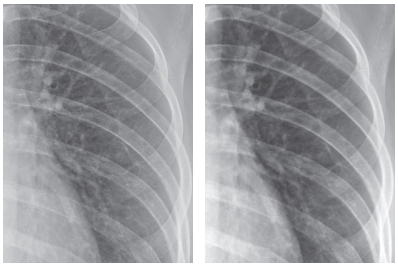
SUPERIOR IMAGE QUALITY

Cutting-edge Hardware Design

Vieworks has strong market leadership in the development and manufacturing of detector panels based on more than 20 years of medical imaging business experience. To provide high-performance detectors consistently, Vieworks has core technologies of circuit design, mechanical design and signal processing. This accumulated effort enables us to supply improved DQE of VIVIX-S V series at a more reasonable price.

Advanced Imaging Processing Technology

Vieworks' post processing algorithm provides supreme image quality. This image processing technology is specialized for VIVIX detectors and is applied to the VXvue software. VIVIX-S V series provides the software grid that eliminates the scattering effect of X-rays to produce clearer images. It is optimized for environments where hardware grids are difficult to use and can be purchased as an option.



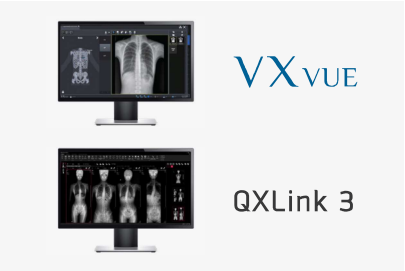
before after

FASTER AND **MORE STABLE WIRELESS COMMUNICATION**

VIVIX-S V series has adopted the 802.11ac wireless standard to improve workflow. This series supports faster communication between the detector and the SCU, thus providing faster image transmission to a viewer program for immediate examination. The three internal antennas ensure stable wireless communication no matter how the detector is positioned.

SPECIALIZED SOFTWARE PACKAGE FOR **VIVIX**

The series is offered as a total solution having advanced software that supports easy upgrades and system integration. The viewer program, VXvue, acquires diagnostic images quickly and provides superior image quality without additional investment. For small clinics and hospitals, the web-based mini PACS, QXLink 3, offers more value and supports an efficient operation throughout the hospital.



ROBUST DESIGN

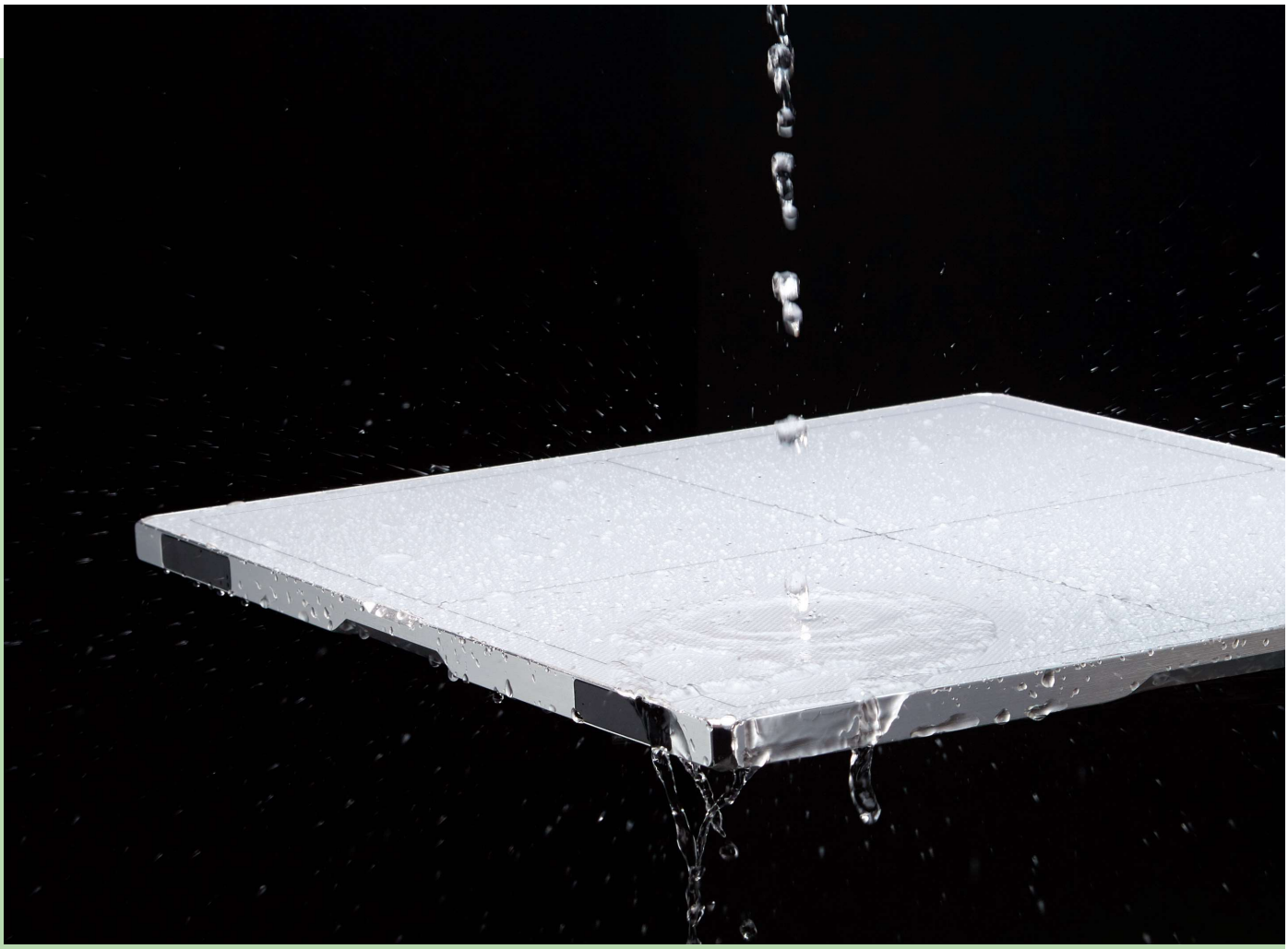
VIVIX-S V series enhances the robustness of the product to reduce errors due to the careless management of the detector.

Height of 100cm

VIVIX-S V series passes drop testing of 100 cm. Thus, radiologists can be free from concern about the product being accidentally dropped in any environment.

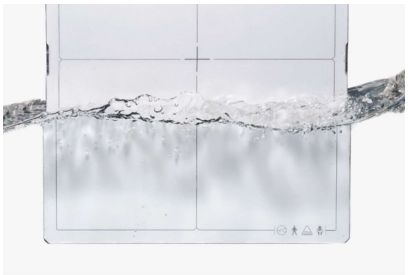
Weight of 400kg

VIVIX-S V series guarantees up to 400 kg under uniform load and 200 kg under the local load. Thus, the series can be used to take images in extreme cases



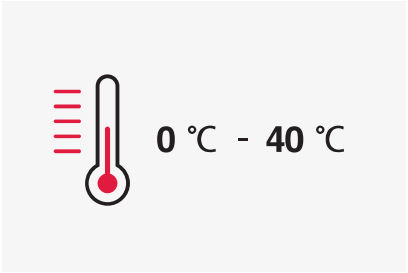
IP67 – WATER AND DUST RESISTANCE

Do not worry about poor operation caused by water and dust. The series has received an IP67 rating for splash, water, and dust resistance. IP67 means that the series can operate safely in the water for up to 30 minutes at depths of less than 1 meter.



WIDER OPERATING TEMPERATURE

VIVIX-S V series works reliably even when taking images outside of typical room temperatures. The series can maintain the same image quality in hotter or colder environments. VIVIX-S V series operates from 0℃ to 4℃, so it is suitable for outdoor or emergency usage.

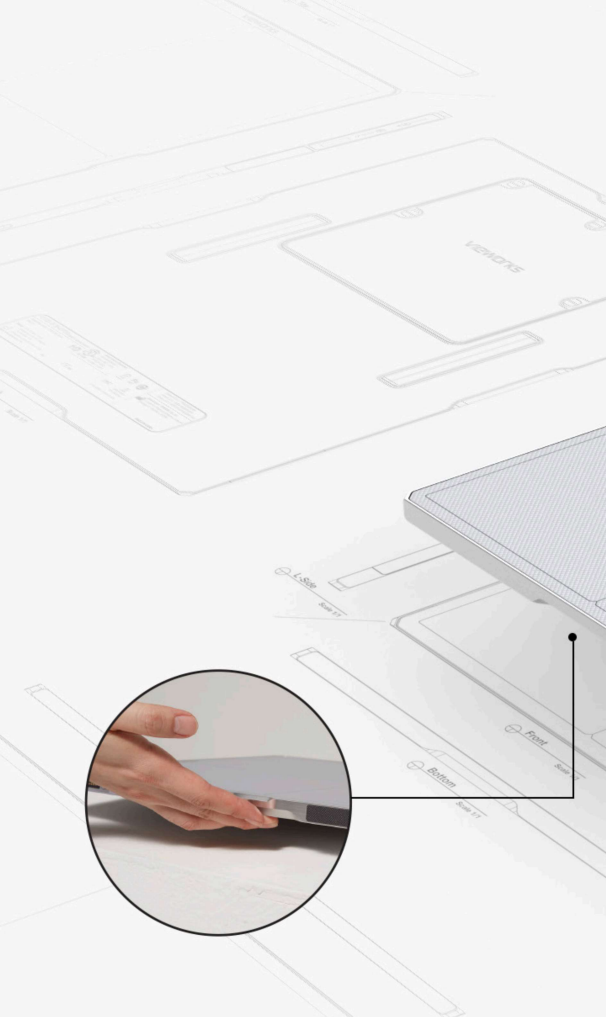


Excellent Durability

The elegance of the new design combines with the robustness of the product, creating a sophisticated, powerful and practical detector in any hospital environment. The durability of VIVIX-S V series is the result of decades of innovation.

Real Mobility

The user-friendly design of VIVIX-S V series improves usability and mobility. Wherever you take VIVIX-S V series, you can experience the easy control of it.

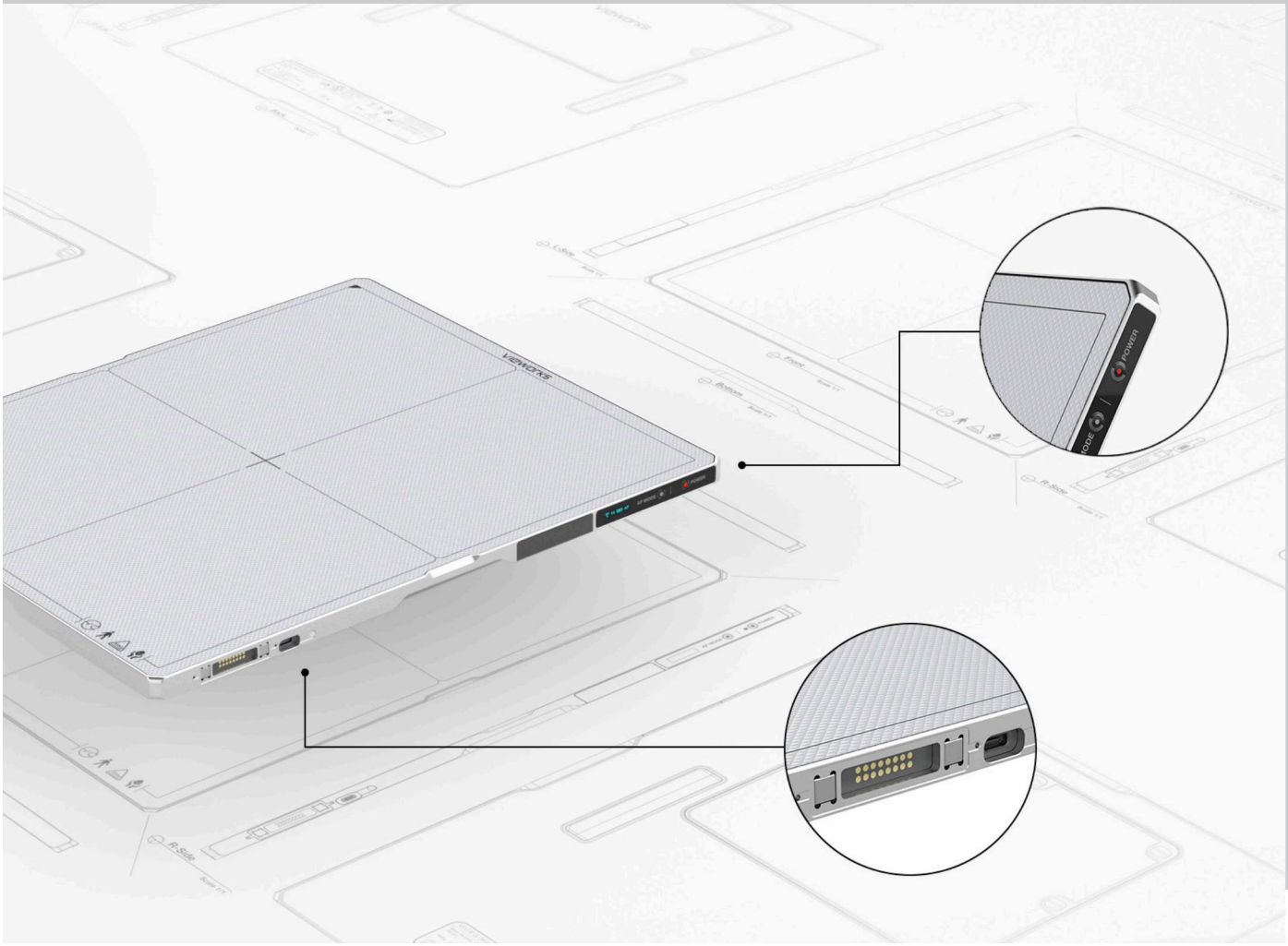


GREATER PORTABILITY

This series maximizes portability. The lightest weight in VIVIX series makes it easy for the user to carry it. The ergonomic design also improves grips, making it easier to carry the detector and preventing accidental drops.

CONVENIENT CHARGING

Portable detectors should be simply charged under any circumstances. VIVIX-S V series offers a variety of charging methods, including standard USB-C interfaces and magnetic tether connectors and provides a cradle for safe-storing and easy-charging.

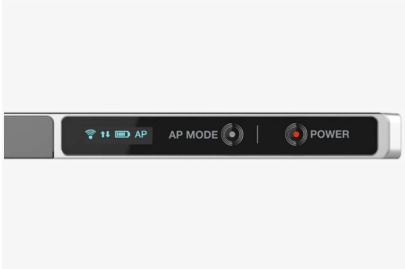


LONG LASTING BATTERY

Radiologists are busy all day and need a detector that can cover the entire working hours. Radiologists do not need to charge batteries during the day because the VIVX-S V series comes with two batteries, allowing up to 16 hours of long operation. Additionally, by using an easy-charging cradle, it allows seamless operation all the time.

OLED STATUS SCREEN

The exterior OLED display provides information about battery charge level, wired/wireless connection mode, and sleep mode status. Radiologists can understand the status quickly and prepare the diagnostic process on time by just looking at the display.



VIVIX-S 2530VW

VIVIX-S 3643VW

VIVIX-S 4343VW

		VIVIX-S 2530VW		VIVIX-S 3643VW		VIVIX-S 4343VW	
Model Name		FXRD-2530VAW	FXRD-2530VAW PLUS	FXRD-3643VAW	FXRD-3643VAW PLUS	FXRD-4343VAW	FXRD-4343VAW PLUS
Technology		a-Si TFT		a-Si TFT		a-Si TFT	
Scintillator		CsI		CsI		CsI	
Pixel Pitch		124 ㎛		140 ㎛		140 ㎛	
Spatial Resolution		4.0 lp/㎜		3.5 lp/㎜		3.5 lp/㎜	
Pixel Matrix		2048 x 2560 pixels		2560 x 3072 pixels		3072 x 3072 pixels	
Image Size		25.4 ㎝ x 31.7 ㎝		35.8 ㎝ x 43.0 ㎝		43.0 ㎝ x 43.0 ㎝	
Grayscale		16 bits		16 bits		16 bits	
Image Acquisition Time		3 s		3 s		3 s	
Recommended Cycle Time		4 s		4 s		4 s	
Data Interface		Gigabit Ethernet IEEE 802.11n / ac		Gigabit Ethernet IEEE 802.11n / ac		Gigabit Ethernet IEEE 802.11n / ac	
X-ray Generator Interface		DR Trigger Mode / AED Mode		DR Trigger Mode / AED Mode		DR Trigger Mode / AED Mode	
Dimensions		28.7 ㎝ x 35.0 ㎝ x 1.5 ㎝		38.4 ㎝ x 46.0 ㎝ x 1.5 ㎝		46.0 ㎝ x 46.0 ㎝ x 1.5 ㎝	
Weight	1 battery	1.95 kg	2.1kg	2.95 kg	3.1 kg	3.45 kg	3.7 kg
	2 batteries	-	-	3.15 kg	3.3 kg	3.65 kg	3.9 kg
Battery		Lithium Ion 3400mAh x 1 8 h (standby) * 1,500 images at a 15-second cycle.		Lithium Ion 3400mAh x 2 16 h (standby) * 3,000 images at a 15-second cycle.		Lithium Ion 3400mAh x 2 16 h (standby) * 3,000 images at a 15-second cycle.	
Dust and Water Resistant		IP67		IP67		IP67	
X-ray Voltage Range		40 - 150 kVp		40 - 150 kVp		40 - 150 kVp	
Operating Environment		0℃ to 40℃ 5 % to 90 % RH (non-condensing)		0℃to 40℃ 5 % to 90 % RH (non-condensing)		0℃ to 40℃ 5 % to 90 % RH (non-condensing)	
Power Consumption		Normal: Max. 15W, Charging: Max. 50W		Normal: Max. 24W, Charging: Max. 80W		Normal: Max. 24W, Charging: Max. 80W	

* Specifications are subject to change without prior notice.

GLOBAL NETWORK

	Vieworks HQ	Vieworks Jeongnam Factory	Vieworks America	Vieworks Europe	Vieworks China
Location	Anyang-si, Korea	Hwaseong-si, Korea	Chicago, USA	Frankfurt, Germany	Shanghai, China
Email	sales@vieworks.com	sales@vieworks.com	support.us@vieworks.com	cs.vweu@vieworks.com	techsupport@vieworks.com
Tel	+82-70-7011-6161	+82-70-7011-6161	+1-312-548-3282	+49-6196-769-3760	+86-21-64955945

41-3, Burim-ro 170 beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Republic of Korea
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VIVIXSV Series-E202011

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vieworks

ISO 9001, ISO 13485

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2016/06

Flat Panel Detectors
VIVIX Series

vieworks

Imaging Expert

Creating Values by Providing Better View

Vieworks, an Imaging Expert in radiographic imaging, introduces VIVIX, a brand-new X-ray flat panel detector series. Vieworks provides total X-ray imaging solutions from imaging hardware device to image processing and viewer software to enhance throughput in the hospitals all over the world with its most advanced technologies in electronic, mechanical, optical, and software engineering.

Vieworks is creating new values by providing a better diagnostic view for the doctors, radiologists, radiographers, and patients with its innovative technologies capturing every single detail. VIVIX Series is designed for a variety of medical applications such as radiography, fluoroscopy, angiography, interventional radiology and dental imaging.

VIVIX-S Series

Flat Panel X-ray Detectors (Static Imaging)

VIVIX-S 1417W
Wireless Portable Flat Panel Detector for Digital Radiography

VIVIX-S 1012N
Versatile Portable Flat Panel Detector for Digital Radiography

VIVIX-S 1417S
Portable Flat Panel Detector for Digital Radiography

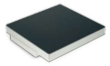
VIVIX-S 1417N (In Development)
Multi-purpose Portable Flat Panel Detector for Digital Radiography

VIVIX-S 1717S
Flat Panel Detector for Digital Radiography

VIVIX-S 1717N
Wide and Slim Portable Flat Panel Detector for Digital Radiography

VIVIX-D Series

Flat Panel X-ray Detectors (Dynamic Imaging)



VIVIX-D 0606C
Compact Dynamic Flat Panel Detector for Dental Imaging

VIVIX-D 1012C
Large-area Dynamic Flat Panel Detector for Dental Imaging

VIVIX-D 0909G
High Frame Rate Dynamic Flat Panel Detector for Fluoroscopy

VIVIX-D 1212G
High Spatial Resolution Dynamic Flat Panel Detector for Radiography and Fluoroscopy

VIVIX-D 1717G
Superior-quality Image Flat Panel Detector for Radiography and Fluoroscopy

VIVIX-S Series

Flat Panel X-ray Detectors (Static Imaging)

VIVIX-S 1012N

VIVIX-S 1012N is Vieworks' new flat panel detector for various digital radiographic applications with active area of 10 x 12 inches. It features Vieworks' unique wireless communication method, Inside AP™ and reliable automatic X-ray exposure detection, Anytime™.

VIVIX-S 1417N (In Development)

VIVIX-S 1417N is Vieworks' new flat panel detector for digital radiographic applications with active area of 14 x 17 inches. It features Vieworks' unique wireless communication method, Inside AP™ and reliable automatic X-ray exposure detection, Anytime™. This portable detector can be used with not only X-ray table or stand, but also mobile X-ray systems.

VIVIX-S 1717N

VIVIX-S 1717N is Vieworks' new flat panel detector for digital radiographic applications with a wide active area of 17 x 17 inches. It features Vieworks' unique wireless communication method, Inside AP™ and reliable automatic X-ray exposure detection, Anytime™.

Features

- High spatial resolution
- Wi-Fi data transfer with dual band (2.4GHz and 5GHz)
- Stable and reliable automatic exposure detection
- Built-in wireless access point with IEEE 802.11n
- Easy and convenient image preview with smart devices
- Viewer software running on Windows™
- Exterior button for switching communication mode
- Shorter booting time and image acquisition time
- Slimmer and lighter
- Lower electric noise and higher DQE and MTF

anytime™ inside AP™ VXvue

Technical Specifications

	VIVIX-S 1012N	VIVIX-S 1417N	VIVIX-S 1717N
Model Name	FXRD-1012NAW / FXRD-1012NBW	FXRD-1417NAW / FXRD-1417NBW	FXRD-1717NA / FXRD-1717NB, FXRD-1717NAW / FXRD-1717NBW
Application	General Radiography		
Technology	Flat panel detector : a-Si TFT with PIN diode		
Scintillator	CsI:Tl / Gd_2O_2S:Tb		
Pixel Pitch	124㎛	140㎛	140㎛
Spatial Resolution	4lp/㎜	3.5lp/㎜	3.5lp/㎜
Pixels	2,048 x 2,560 pixels	2,560 x 3,072 pixels	3,072 x 3,072 pixels
Image Size	10 x 12 inches (25 x 32cm)	14 x 17 inches (35 x 43cm)	17 x 17 inches (43 x 43cm)
Grayscale	16 bit	16 bit	16 bit
X-ray Voltage Range	40 – 150kVp	40 – 150kVp	40 – 150kVp
X-ray Generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode		
Wireless Interface	IEEE 802.11n (2.4GHz / 5GHz dual band)		
Image Acquisition Time	1.5 sec (wired) / 3 sec (wireless)		
Dimensions	350 x 287 x 15㎜	460 x 384 x 15㎜	460 x 460 x 15.5㎜
Weight	Approx. 2.2kg	Approx. 3.3kg	Approx. 4.2kg (wired) Approx. 4.5kg (wireless)
Operating Environment	10 – 35℃, 30 – 85% RH (non-condensing)		
Power	DC 24V, 0.8A (Max.)	DC 24V, 1.0A (Max.)	DC 24V, 1.0A (Max.)
Battery	Lithium Ion 3,100mAh	Lithium Ion 3,100mAh x 2	Lithium Ion 3,100mAh x 2

* Specifications are subject to change without prior notice.

VIVIX-S Series

Flat Panel X-ray Detectors (Static Imaging)

VIVIX-S 1417W

VIVIX-S 1417W is a flat panel detector with 14 x 17 inches coverage area for general radiographic applications, which is a perfect solution for upgrading conventional X-ray systems still currently working on X-ray film and CR basis to full digital systems. Acquired images are transmitted through Wi-Fi.

VIVIX-S 1417S

VIVIX-S 1417S is a flat panel detector with 14 x 17 inches coverage area for general radiographic applications for human and veterinary anatomy. The handle is removable depending on the needs of your applications.

VIVIX-S 1717S

VIVIX-S 1717S is a flat panel detector with a large field coverage area of 17 x 17 inches designed for general radiographic applications for human and veterinary anatomy using its unique image processing system and proprietary flat panel detector.

Features

- High spatial resolution with 140um pixel array
- Wi-Fi data transfer with dual band (2.4GHz and 5GHz)
- Stable and reliable automatic exposure detection
- Built-in wireless access point with IEEE 802.11n
- Easy and convenient image preview with smart devices
- Viewer software running on Windows™

anytime™ inside AP™ VXvue

Technical Specifications

	VIVIX-S 1417W	VIVIX-S 1417S	VIVIX-S 1717S
Model Name	FXRD-1417WA / FXRD-1417WB	FXRD-1417SA / FXRD-1417SB	FXRD-1717SA / FXRD-1717SB
Application	General Radiography		
Technology	Flat panel detector : a-Si TFT with PIN diode		
Scintillator	CsI:Tl / Gd_2O_2S:Tb		
Pixel Pitch	140㎛	140㎛	140㎛
Spatial Resolution	3.5lp/㎜	3.5lp/㎜	3.5lp/㎜
Pixels	2,560 x 3,072 pixels	2,560 x 3,072 pixels	3,072 x 3,072 pixels
Image Size	14 x 17 inches (35 x 43cm)	14 x 17 inches (35 x 43cm)	17 x 17 inches (43 x 43cm)
Grayscale	14 bit	14 bit	14 bit
X-ray Voltage Range	40 – 150kVp	40 – 150kVp	40 – 150kVp
X-ray Generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode		
Data Interface	Gigabit Ethernet, IEEE 802.11a/b/g/n (2.4GHz / 5GHz dual band)	Gigabit Ethernet	Gigabit Ethernet
Image Acquisition Time	2 sec (wired) 2 sec (preview, wireless) 4.5 sec (high resolution, wireless)	1.2 sec	1 sec
Dimensions	460 x 384 x 15㎜	460 x 384 x 15㎜	470 x 470 x 35㎜
Weight	Approx. 3.3kg	1417SA: 3.2kg / 1417SB: 3.1kg	Approx. 11kg
Operating Environment	10 – 35℃, 30 – 85% RH (non-condensing)		
Power	DC 24V, 0.5A	DC 24V, 0.5A	DC 24V, 0.8A
Battery	Lithium Ion Polymer 4,000mAh	–	–

* Specifications are subject to change without prior notice.

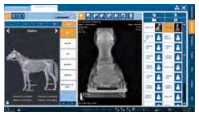
Software

VXvue

DR acquisition viewer with simple workflow

- Easy operation and high throughput
- User-friendly touch GUI
- Useful functions : Auto Cropping, Auto Grid Suppression, Auto Stitching
  Auto Labeling, Auto Rotation, Free Rotation, Multi Layout, etc.
- DICOM 3.0 Compatible : MWL, Send, Print, MPPS, etc.
- Equipment interface : generator, U-arm, collimator, DAP, etc.
- Various operation modes : human, veterinary, vehicle, equine, etc.
- Study management : Exposure Index, Statistics, etc.
- Customized functions and various themes


Vehicle Mode


Equine Mode


Free Rotation


Statistics


Zoom in by Touch GUI


Image Order Change


Multi Layout (Auto Stitching)


Multi Layout Setting

XIPL

Advanced X-ray image processing library

- Fine-tunable parameters
- Image check right after parameter adjustment
- High tolerance for radiation exposure variations
- Useful functions : Auto Cropping, Auto Grid Suppression,
  Auto Defect Correction


Auto Cropping


Fine Tuning


Parameter Management

QXLink 3

Streamlined PACS

- Unlimited archiving with all modalities
- More than 60 advanced measurement tools
  including chiropractic
- Virtual surgery tools for preoperative planning
- Flexible layout and full size pages for DICOM Print


Study List Preview Mode


Human Measurement


Veterinary Measurement


Report with Print Preview

Accessories

System Control Unit

- Interface with workstation through Gigabit Ethernet
- Compact and robust
- Generator interface
- Multiple detector connection
- Wi-Fi data transfer with dual band (2.4GHz and 5GHz, for Wireless)
- Dimensions : 210×300×54.2㎜ (Wired)
  236×300×58㎜ (Wireless)
  210×170×45㎜ (Wireless, SCU mini)

Battery Charger

- 2 batteries chargeable simultaneously
- Compact and portable
- Dimensions : 192 x 101 x 26㎜

Battery Pack

- Capacity : 3,100mAh
- Dimensions : 160 x 61.8 x 5.7㎜

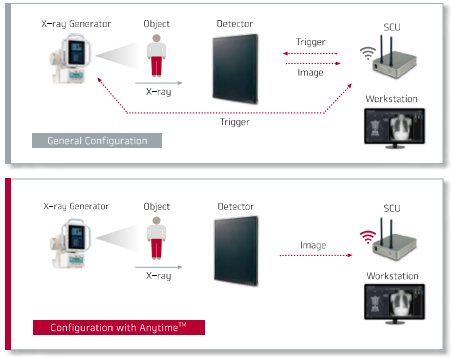
Tether Cable

- Flexible, rigid and stretchable
- Gigabit Ethernet communication
- Length : 7m

Technologies

Automatic Exposure Detection

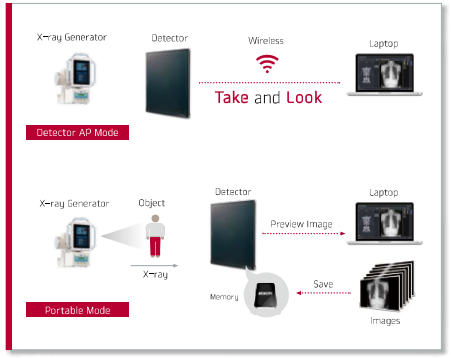
Stable and reliable AED function enables users to operate the detector without any wire connection or electronic interface with X-ray generator



anytime™

Wireless Access Point

- Wireless access point inside the detector makes it truly portable
- Users can operate the detector through laptop or workstation
- The detector can save the achieved images up to 200



inside AP™

VIVIX-D Series

Flat Panel X-ray Detectors (Dynamic Imaging)

VIVIX-D 0606C

VIVIX-D 0606C is designed for dental CBCT application and mini C-arm with active area of 6 x 6 inches. With compact and robust design, it provides high resolution images with high frame rate.

VIVIX-D 1012C

VIVIX-D 1012C is designed for dental CBCT and cephalometry with active area of 10 x 12 inches. It provides various image acquisition modes for dental imaging.

VIVIX-D 0909G

VIVIX-D 0909G is designed for C-arm with active area of 9 x 9 inches. It provides high quality image with high sensitivity and high frame rate.

VIVIX-D 1212G

VIVIX-D 1212G is designed for C-arm and R/F systems. with active area of 12 x 12 inches. It provides high quality and high spatial resolution images.

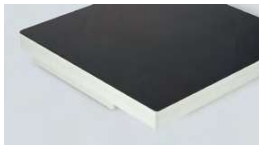
VIVIX-D 1717G (in development)

VIVIX-D 1717G is designed for R/F system with active area of 17 x 17 inches. It provides high quality and high spatial resolution images.

Vieworks's dynamic flat panel detectors are designed for the integration into X-ray systems. X-ray system integrator obtains the necessary certification for medical use.

Features

- High spatial resolution and high frame rate
- Real time on-board image correction
- Real time on-board image processing
- Stable data transfer through GigE solution
- SDK for Windows™ applications
- Short boot time of about 1 minute



Technical Specifications

	VIVIX-D 0606C	VIVIX-D 1012C	VIVIX-D 0909G	VIVIX-D 1212G	VIVIX-D 1717G
Model Name	FXDD-0606CA	FXDD-1012CA / FXDD-1012CB	FXDD-0909GA	FXDD-1212GA	FXDD-1717GA
Application	CBCT, Mini C-arm	CBCT, Cephalometry	C-arm	C-arm, R/F	R/F
Technology	Flat panel detector : a-Si TFT with PIN diode				
Scintillator	CsI: Tl	CsI: Tl / Gd_2O_2S:Tb	CsI: Tl	CsI: Tl	CsI: Tl
Pixel Pitch	119㎛	124㎛	179㎛	145㎛	140㎛
Spatial Resolution	4.2lp/㎜	4.0lp/㎜	2.8lp/㎜	3.4lp/㎜	3.5lp/㎜
Pixels	1,280 x 1,280 pixels	2,048 x 2,560 pixels	1,280 x 1,280 Pixels	2,048 x 2,048 pixels	3,072 x 3,072 pixels
Image Size	6 x 6 inches (15 x 15cm)	10 x 12 inches (25 x 30cm)	9 x 9 inches (20 x 20cm)	12 x 12 inches (30 x 30cm)	17 x 17 inches (43 x 43cm)
Grayscale	16 bit	16 bit	16 bit	16 bit	16 bit
X-ray Voltage Range	40 ~ 150kVp	40 ~ 150kVp	40 ~ 150kVp	40 ~ 150kVp	40 ~ 150kVp
X-ray Generator Interface	Internal Trigger, External Trigger				
Data Interface	1 port Gigabit Ethernet (1000BASE-T)	1 port Gigabit Ethernet (1000BASE-T)	1 port Gigabit Ethernet (1000BASE-T)	1 port Gigabit Ethernet (1000BASE-T)	1or2 port Gigabit Ethernet (1000BASE-T)
Data Transmission Rate	Max. 1Gbps	Max. 1Gbps	Max. 1Gbps	Max. 1Gbps	Max. 2Gbps
Frame Rate	28fps @ 1x1, 56fps @ 2x2, 240fps @ Panoramic Scan	9fps @ 1x1, 18fps @ 2x2	29fps @ 1x1, 58fps @ 2x2	14fps @ 1x1, 30fps @ 2x2	10fps @ 1x1, 30fps @ 3x3
Dimensions	196 × 181 × 50㎜	347 x 287 x 45㎜	262 x 262 x 50㎜	328 x 338 x 50㎜	471 × 471× 35㎜
Weight	Approx. 1.85kg	Approx. 3.9kg	Approx. 2.75kg	Approx. 3.6kg	Approx. 11kg
Operating Environment	15 ~ 35℃, 30 ~ 85% RH (non-condensing)				
Power	DC 12V, 1.5A	DC 24V, 0.5A	DC 24V, 0.7A	DC 24V, 1.3A	DC 24V, 1.6A

* Specifications are subject to change without prior notice.

Accessories

Generator Interface Unit

- Easy integration with Generator I/F
- Status LED for status check
- Dimensions: 197.9 x 116.5 x 31.2 mm

Applications

Dental CBCT	VIVIX-D 0606C	VIVIX-D 1012C		
Cephalometry		VIVIX-D 1012C		
Mini C-arm	VIVIX-D 0606C			
C-arm		VIVIX-D 0909G	VIVIX-D 1212G	
Radiography / Fluoroscopy			VIVIX-D 1212G	VIVIX-D 1717G

Technologies

On-board Image Processing

- DSA (Digital Subtraction Angiography)
  Enhancing the contrast of blood vessels to make interventional radiologic surgery more convenient and to reduce the dose of contrast agent
- Recursive Filter
  Real-time removal of random noise by averaging multiple previous images
- HSNR (High Standard Noise Reduction)
  Real-time removal of noise without lagging
- SLDC (Single Layer Dynamic Compression) Filter
  Achieving high contrast at both high and low dose area in one image

On-board Image Correction

- DSNU (Dark Signal Non-Uniformity) correction
- PRNU (Pixel Response Non-Uniformity) correction
- Defect correction