

TECHNICAL DATA	
Resolution (theoretical)	17 lp/mm
Image pixel size	30 µm
Image grey levels	16 bit (65,536 grey levels)
Supported plate sizes	Size 0, 1, 2, 3
Plate size selection	Automatic
Read time	4 – 8 s
Plate Deletion	Automatic
Dimensions (H x L x P)	176 x 133 x 264 mm
Weight	3.8 kg
Power supply	110 - 240 V 50/60 Hz (24 Watts)
Connectivity	ETHERNET direct to PC or in LAN
Acquisition software (for PC)	iCapture with MultiROOM interface for third party software
Image management software (for PC)	iRYS (complies with ISDP®10003:2020 as per EN ISO/IEC17065:2012 certificate number 2019003109-2) and App iPad iRYS viewer (free)
Supported protocols	DICOM 3.0, TWAIN, VDDS
DICOM nodes	IHE compliant (Print; Storage Commitment, SR document; WorkList; MPPS; Query/Retrieve)

CE  
0051



**Size 0**  
22 x 31 mm  
Pixels  
762 x 1024  
Memory  
size 1 MB



**Size 1**  
24 x 40 mm  
Pixels  
792 x 1321  
Memory  
size 2 MB



**Size 2**  
31 x 41 mm  
Pixels  
1024 x 1354  
Memory  
size 3 MB



**Size 3**  
27 x 54 mm  
Pixels  
891 x 1783  
Memory  
size 4 MB

MINIMUM SYSTEM REQUIREMENTS	
Supported operating systems:	Microsoft® Windows® 10 Professional 64 bit
Display settings:	1280 x 1024; 1344 x 768 or greater, 16 million colours
Port:	PC Server: RJ 45   PC Client connected in LAN



[www.my-ray.com](http://www.my-ray.com)

09/2023 MFOSGB201500

Data may be subject to change without notice. According to the standards in force, in extra-EU areas the availability and specifications of some products and/or characteristics may vary. Please contact your local distributor for further information.



**Hy-Scan**  
Phosphor  
plate scanner



**BU Medical Equipment**  
**Plant** - Via Bicocca, 14/c - 40026 Imola - Bo (Italy) tel. +39 0542 653441 - fax +39 0542 653555  
**Headquarters** - Cefla s.c. Via Selice Provinciale, 23/a - 40026 Imola - Bo (Italy) tel. +39 0542 653111 - fax +39 0542 653344  
**Cefla North America**, Inc. 6125 Harris Technology Blvd. Charlotte, NC 28269 - U.S.A. Toll Free: (+1) 800.416.3078 Fax: (+1) 704.631.4609



# Uncompromising simplicity and quality.

Always-reliable diagnosis, comfort, user-friendliness and fast capture times. Hy-Scan gives access to unrivalled digital technology and film-like ergonomics - all in one compact, affordable device.

**MyRay, just right for you.**

**IMPROVED ERGONOMICS:**

Thin, flexible, wireless like a film, 100% active area without positioning limitations.

**MAGNETIC PLATE:**

perfectly integrated with the phosphor layer to optimise the reading process with an automatic TOUCH-FREE acquisition sequence start.

**HIGH SENSITIVITY:**

improved image quality, minimum X-ray dose for the patient.

**ETHERNET CONNECTION**

Fast, secure transfer of images to the PC next to the workstation or directly from the server in MultiROOM.

**LED STATUS INDICATOR**

Process always under control with instantaneous display of scanner status (ready / reading / image deletion / standby / etc.) thanks to the status indicator.

**TOUCH-FREE**

Fully automatic plate reading process.

**PLATE BOX**

Practical, portable container to store and protect plates tidily.

**ULTRA-COMPACT AND ERGONOMIC**

Featuring essential, compact design, the Hy-Scan scanner is perfect for any dental surgery. Extremely versatile, it can be installed both horizontally on the table or wall-mounted vertically using the special bracket..



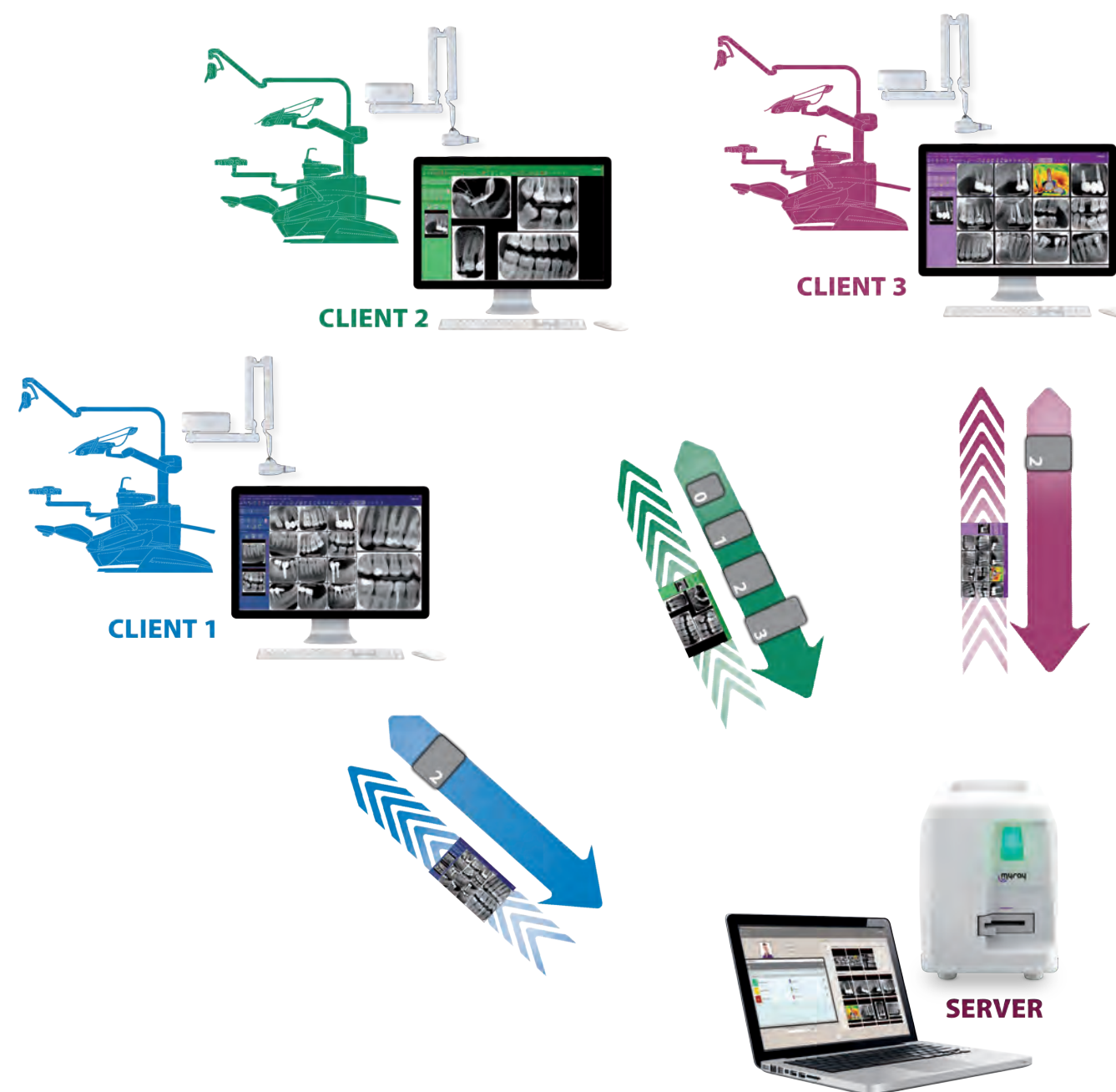
# Functions that make the difference.

Thanks to constant iRYS software development, MyRay solutions benefit from ever-better functions and performance that respond to dentists' real needs.

A series of cutting-edge image processing filters are provided to ensure the system genuinely improves diagnostics. Users can select which filters to use from among the pre-set families and define any further customisations according to their visual or diagnostic preferences. All filters are accessible from the iRYS image display window, where users can decide which ones to apply automatically.

Moreover, remote phosphor scanner control for clinics with multiple surgeries improves workflow, productivity and patient engagement.

- Optimized filters for phosphor plates
- Simultaneous management of 5 images
- Images improved for specific diagnoses
- Remote image control with MultiROOM
- Minimized management times



## MultiIMAGE

MyRay has developed a dedicated function to respond to the needs of dentists like you. By using proprietary PiE (Powerful image Enhancer) algorithms optimised for phosphor plates, this function lets dentists simultaneously capture, display and share a set of (up to 5) images. Each image is the result of a different type of improvement designed to highlight various anatomical details with different levels of sharpness and contrast, ensuring dentists can diagnose better.

## PERFECT FOR MULTIROOM USE

Hy-Scan lets you optimise dental clinic workflows in MultiROOM. Thanks to the MultiROOM function, usable via Hy-Scan, the remote scanning system (connected to the SERVER) can be managed with a reservation made directly from the workstation alongside the patient (CLIENT PC).

The patient is defined by a name and the colour of the surgery. A simple APP - available in iCapture - lets you automatically save a series of remotely scanned images on the medical record of the patient, who is pre-selected in iRYS from the surgery from which you made the reservation. These images will be displayed immediately on the PC next to the patient.



# Hy-Definition.

Outstanding digital imaging quality combined with the practicality and affordability of traditional film.

The Hy-Scan phosphor plate scanner provides the perfect balance between technology and tradition. Hy-Scan combines the very best digital diagnostic technology with the advantages of traditional film plates. A compact, fast, simple device to use, which produces high resolution intraoral images for always-reliable diagnosis. The plates, ergonomic and thin, are easy to position and offer maximum patient comfort.

The TOUCH-FREE plate insertion and recognition system makes the scan even simpler, also in MultiROOM. The scanner can import and digitize each image in rapid sequence in just a few seconds, allowing them to be displayed immediately on the PC or, via a special APP, on an iPad.

**Easy, compact, reliable diagnostics.**

- Essential, light, compact design
- High definition digital images
- Ergonomics and positioning comfort
- TOUCH-FREE user-friendliness
- Hard-wearing and reliable in MultiROOM



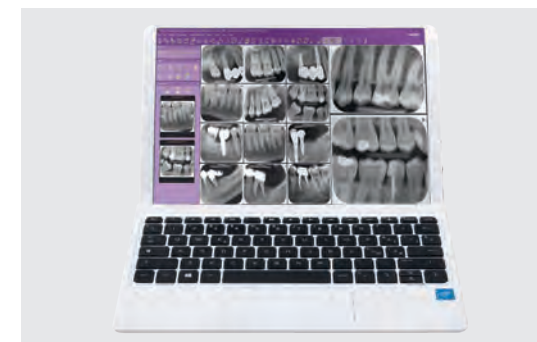
## TOUCH-FREE ACQUISITION

User-friendliness and maximum workflow efficiency. Hy-Scan has a servo-assisted, fully automatic system that accepts and scans (TOUCH-FREE) the impressed plates, recognises the size, imports the image to the PC and deletes all the data from the plate so it is immediately ready for the next image capture.



## FAST IMAGE DISPLAY

A high quality image can be imported in just a few seconds. Equipped with cutting-edge technology, Hy-Scan lets users view sharp images extremely quickly, leading to effective diagnosis and better communication with the patient.

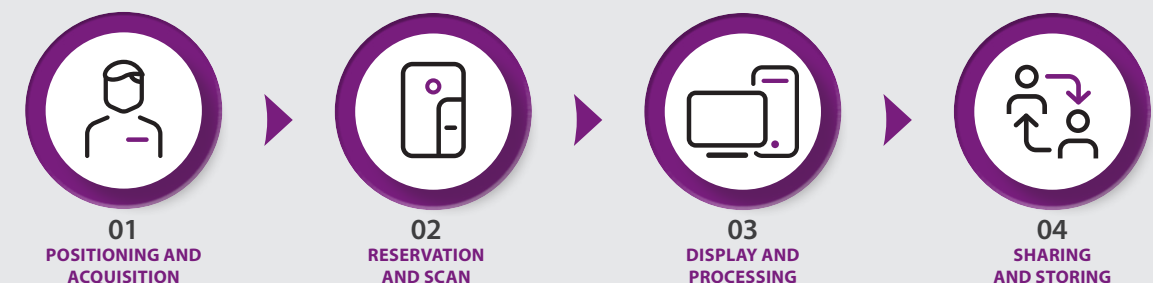


## iRYS - iPad CONNECTIVITY

Import data quickly thanks to the ethernet connection. Save and display captured images on the PC using the all-in-one iRYS diagnostic software with the convenient iPad viewer app and with any other control programme or image viewer equipped with a TWAIN or DICOM interface.

## HIGH QUALITY IMAGES IN EVERY APPLICATION

Hy-Scan is the ideal tool for all clinical applications: endodontics, prostheses and implant surgery, periodontics and caries diagnosis. It reliably provides the very best high definition images with a resolution of 34 pixel/mm. The scanner is compatible with four sizes for the acquisition of paediatric (Size 0), periapical (Size 1), bitewing (Size 2) and long bitewing (Size 3) images with a pixel size of 30 µm.



## THE BEST WORKFLOW FOR EFFECTIVE DIAGNOSIS

Take X-rays with the desired plate size via user-friendly positioning and, if necessary, book the networked scanner. Capture high definition images by inserting the plates one at a time. The images are then transferred to the local PC and/or sent to the client who booked it, ready to be consulted, shared and stored with iRYS software (or other viewer), printed and e-mailed.

# Perfect for your diagnostic needs.

Diagnosis in the palm of your hand: acquire intraoral images, view them on the touch-sensitive display and use them for all your clinical needs. X-pod smooths workflows, improves communication with the patient and optimises investment in your surgery.

**MyRay, just right for you.**



## Technical specifications.

X-pod	
Handheld unit dimensions	142 x 83 x 31 mm / 5.6 x 3.3 x 1.2 pollici
Handheld unit weight	0.38 Kg / 0.8 lbs
Display dimensions	95 x 54 mm / 4.3 inches (diagonal)
Display colour performance	16.7 million colours, 500 cd/m <sup>2</sup> backlighting, anti-reflection screen
Interface requisites PC or MAC*	USB 2.0 or later, Bluetooth 2.0 EDR, SD / SDHC card
Power supply	5 V DC, 500 mA (USB) / 9 V DC, 1.5 A (fast charge adapter)
Image format	JPG, PNG, BMP, TIF
Maximum image size	3 - 4.5 Mb
Acquisition software (for PC*)	iCapture with TWAIN interface
Image management software (for PC*)	iRYS with DICOM 3.0 interface
Supported operating systems	Microsoft® Windows® 10 Professional 64 bit Apple® Mac OS X 10.5 Leopard or later versions*
Display settings	280 x 1024; 1344 x 768 or greater, 16 million colours

\*Note: the image acquisition and processing programme for Mac OS is NOT supplied.

Intraoral sensors	REGULAR - Size 1	LARGE - Size 2
External dimensions (mm)	38.9 x 24.9	41.9 x 30.4
Thickness (mm)	5.3	5.7
Pixel matrix	1500 x 1000	1700 x 1300
Pixel size (µm)	20	20
Max. spatial resolution (lp/mm)	25	25
Digital image depth in bits	14-bit acquisition - 16,384 levels of grey	
Scintillator technology	CsI (Caesium Iodide) with micro-columnar structure	
Protection against direct exposure	FOP (Fibre Optics Plate)	
Compatibility with X-ray generators	Any AC or DC technology X-ray generator with kV values in the 60 – 70 kV range and precision control of exposure times	

CE  
0051



[www.my-ray.com](http://www.my-ray.com)



**BU Medical Equipment**  
**Plant** - Via Bicocca, 14/c - 40026 Imola - Bo (Italy) tel. +39 0542 653441 - fax +39 0542 653555  
**Headquarters** - Cefla s.c. Via Selice Provinciale, 23/a - 40026 Imola - Bo (Italy) tel. +39 0542 653111 - fax +39 0542 653344  
**Cefla North America**, Inc. 6125 Harris Technology Blvd. Charlotte, NC 28269 - U.S.A. Toll Free: (+1) 800.416.3078 Fax: (+1) 704.631.4609

Data may be subject to change without notice. 09/2023 MXPDCB171500

According to the regulations in force, some products and/or features may have different availability and characteristics in areas outside of the European Union. Please contact your local distributor.



**X-pod**  
Portable imaging system





X-pod • portable imaging system.

**FAST CONNECTOR**  
MyRay size 1 sensor interchangeable with size 2, with strong stable connection.

**MEMORY (SD CARD)**  
Store and organise hundreds of images directly on the removable Secure Digital Card.

**DISPLAY (4,3")**  
See every detail on the high definition touch-screen thanks to three zoom levels.

**BLUETOOTH CONNECTION**  
Instantaneous, wireless transfer of images onto the PC directly with interference-free protocol (patented).

**HIGH DEFINITION SENSOR (CSI+FOP+CMOS)**  
The Cesium Iodide (CsI) scintillator, the optic fibre layer (FOP) and high definition CMOS sensor (20µm) provide always-sharp, clear images.

X-pod • new real-time imaging vision.

# A new vision of intraoral imaging.

Acquire, display, process and manage every detail directly in the palm of your hand on the most versatile, modern device available.

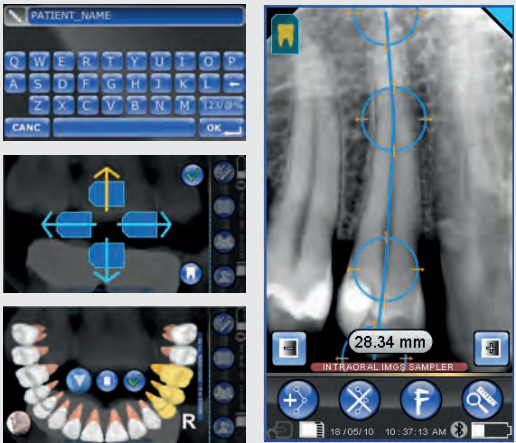
X-pod, the exceptional portable wireless device with large touch-screen display, let's you take control and decide how to manage your workflow, letting you enjoy fast consultation, storage and sharing of diagnostic images. Acquire intraoral X-rays, view them and show them to your patient immediately to ensure more effective communication. You can synchronise it with the iRYS software on your PC or work in complete independence, saving and processing images on the SD memory card.

**Portable, versatile, high quality diagnostic.**

- Immediate diagnostics
- Real-time image processing
- Portability and working freedom
- Synchronisation with PC - iRYS software
- Bluetooth image transfer

Powerful X-pod software provides an array of advanced functions with an intuitive graphic interface that lets you save and process images directly on the device without any need for a PC connection.

- Edit the patient name
- Modify filters to improve luminosity and contrast
- Measure point-to-point distance and calibrate the image
- Assign the dental region on the Dentition Chart
- Correct image rotation
- Archivia su cartella paziente



X-pod • infinite possibilities.



**LONG BATTERY LIFE AND PORTABILITY**  
X-pod is compact, pocket-sized and offers outstanding battery life. The lithium polymer battery allows day-long use, inside and outside the surgery, without ever having to worry about charging. Images are saved and organised in patient-specific folders on the removable Secure Digital memory card.



**SMART HOLSTER**  
When it's not in the palm of your hand, X-pod can be stowed in the smart Holster. This holder that can be installed on any surface, such as on the arm of your intraoral X-ray unit. Thanks to the efficient, adjustable system, the image can be rotated and the display tilted to give the best viewing angle.



**WORKLIST - iRYS SOFTWARE**  
Set up the patient acquisition list from the PC using the outstanding all-in-one iRYS software and consult patient folders on the X-pod screen. Acquire images, then display and save them directly in patient folders with all the correct position and size data. Transfer and synchronise data on the PC-based iRYS database with a USB lead at the end of the day or instantaneously via Bluetooth using secure interference-free MyRay transmission technology (Patented).



**ERGONOMIC - RELIABLE - DURABLE SENSOR**  
The sensor features ergonomic design with rounded corners, a thin profile and a flexible lead; all this ensures adaptation to the anatomy of the oral cavity and efficient, comfortable positioning. The optic fibres layer (Fibre Optics Plate) collimates the radiation, ensuring clearly defined images and protecting against direct X-ray penetration to extend the working life of the sensor. The X-pod sensor is made of exceptionally high quality materials and is resistant to impact, liquids and dust..

Available in size 1 and size 2, it adapts to all types of examination.



[www.my-ray.com](http://www.my-ray.com)



**BU Medical Equipment**

**Plant** - Via Bicocca, 14/c - 40026 Imola - Bo (Italy) tel. +39 0542 653441 - fax +39 0542 653555

**Headquarters** - Cefla s.c. Via Selice Provinciale, 23/a - 40026 Imola - Bo (Italy) tel. +39 0542 653111 - fax +39 0542 653344

**Cefla Medical North America**

6125 Harris Technology Blvd. - Charlotte, NC 28269 - Ph: 704 598 0020 - [www.ceflamedicalna.com](http://www.ceflamedicalna.com) - [info@cefladental.com](mailto:info@cefladental.com)

Data subject to changes without prior notice. 02/2024 MDCSGB221500  
According to the regulations in force, some products and/or features may have different availability and characteristics in areas outside of the European Union. Please contact your local distributor.



**Zen-X DCiS**

DC Wireless intraoral sensor





# As simple as freedom!

The first intraoral sensor with Wire Free system and DC (Direct Conversion), for accurate X-ray imaging in just a few steps.

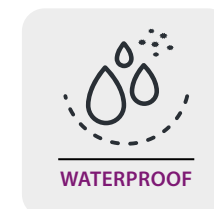
Cordless for maximum usability.

Compact and ergonomic for patient comfort.

**Wire Free. To be free.**



IP67 certified  
for protection  
against liquids  
and dust.



## COMPACT

Less stress for the patient with rounded edges. Minimum thickness thanks to Direct Conversion (DC) technology which streamlines the number of internal components. Extremely slim rechargeable lithium battery housing hub.

## PRACTICAL

Status LED on the back. Size 2 with large active area for generation of the X-ray image.

## ALL IN ONE

Docking station for housing and charging the sensor when not in use.



## WIRE FREE

Antenna for data reception in Wireless mode: minimum consumption, maximum image yield.

## WHEREVER YOU WANT

Place your docking station on a work surface, on your desk or on the wall using the special fixing kit. Status LED always visible. Simple and always accessible USB connection.



# Efficient and patient-friendly.

Enhance your workflow and patient experience with Zen-X DCiS. The right tool to get the most out of your time.

Experience the convenience of our Wire Free system: no cables to hinder movements; no stress for the patient thanks to the sensor low thickness and rounded corners; accessories to facilitate positioning while minimising discomfort for the patient.

Since the cable is the part most exposed to wear, the Wire Free system also guarantees a longer sensor life.

Zen-X DCiS, integrating direct conversion technology, has no internal easily breakable components and is therefore more resistant to falls and impacts.

**Simply the best.**

- Compact and minimally invasive
- Cordless
- Easy positioning



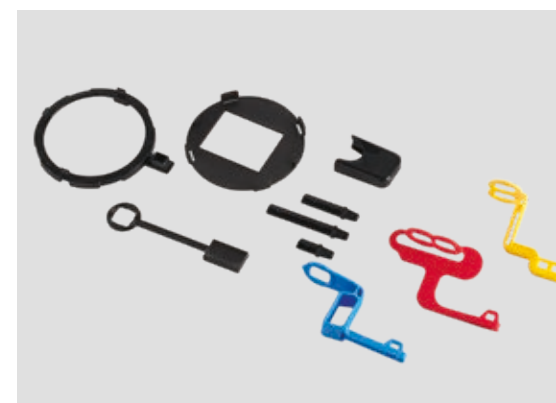
## DESIGNED TO LAST

Stronger outer shell and internal components for increased impact and compression resistance and a longer life. No fragile components such as the scintillator which is required in sensors that do not integrate DC technology.



## COMFORT

Non-invasive sensor thanks to its extremely low thickness and smooth lines without edges. Zen-X DCiS puts patient health and care first.



## POSITIONING

Alignment system created specifically for Zen-X DCiS that does not add extra bulk to the sensor profile and guarantees superior patient comfort.

Easy to position, it allows the X-ray unit to be brought closer to the patient face exposing only the required areas - thanks to a special alignment ring and positioners designed to adapt perfectly to specific diagnostic needs.

# The ultimate 2D imaging.

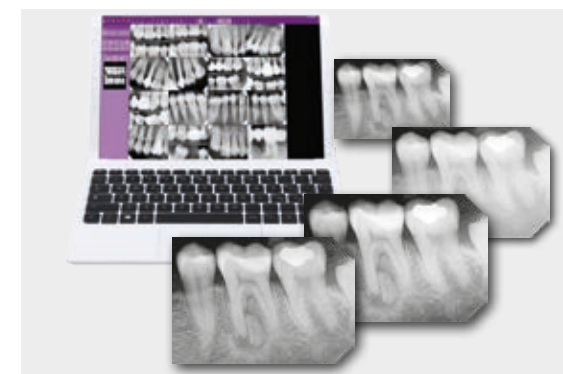
First wireless direct conversion sensor.  
Zen-X DCiS incorporates all the best high-tech imaging technologies.

Zen-X DCiS integrates direct conversion technology, which does not require the conversion of X-rays into visible light. Fewer steps, fewer components, smaller footprint and above all - perfect image quality. Once scanning is complete, iRYS will take care of everything.

MyRay's native software features advanced filters to further enhance the image or emphasize details.

**Less is more.**

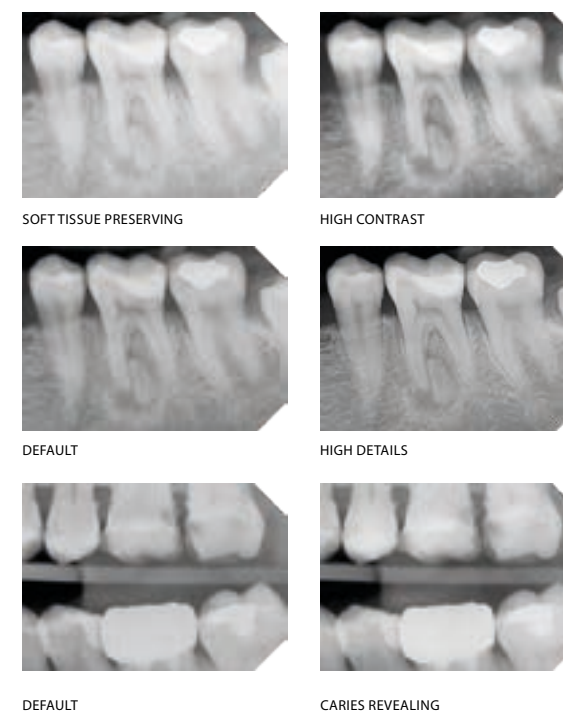
- Fewer required steps
- More sharpness
- Better contrast
- Minimal bulk
- Long life



## MultiIMAGE

This original MyRay function is designed to meet the real needs of dentists like you.

By using proprietary PiE (Powerful image Enhancer) algorithms optimised for the Zen-X DCiS sensor, this function lets dentists simultaneously capture, display and share a set of up to 5 images. Each image is the result of a different type of improvement designed to highlight various anatomical details with different levels of sharpness and contrast, ensuring dentists can diagnose better.



## PiE (Powerful Image Enhancer) FILTERS

New set of filters to highlight all the details necessary for different clinical requirements.

**Soft tissue preserving:** keeps areas at risk of image darkening unaltered to highlight soft tissues.

**High contrast:** enhances the contrast, if the image is low in contrast due to anatomical reasons or X-ray parameters.

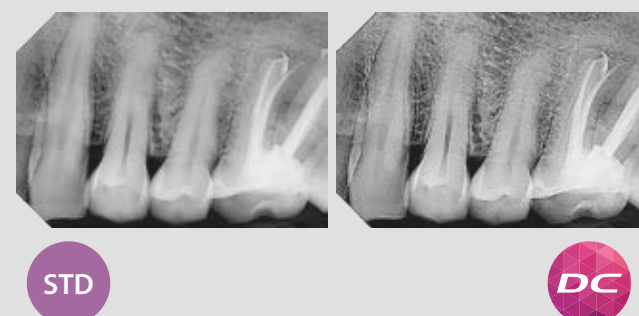
**Default:** balances noise, contrast and sharpness.

**High details:** emphasizes image details.

**Caries revealing:** improves the contrast level of bitewing images allowing easier identification of interproximal caries.

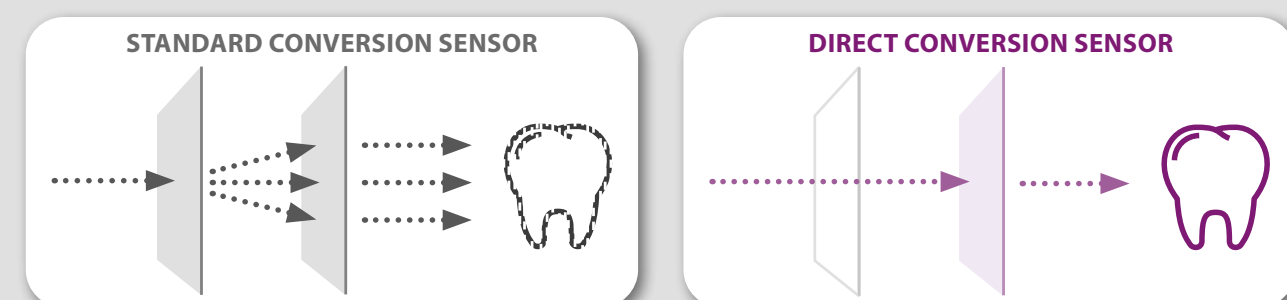
## IN-DEPTH DETAIL

The best of 2D X-ray imaging: Zen-X DCiS direct conversion sensor produces sharper images with better contrast than a conventional sensor.



## THE BENEFITS OF DIRECT CONVERSION

With a standard sensor X-rays have to be converted into visible light, using a scintillator, because the sensor reacts to light like a photographic film. Zen-X DCiS, on the other hand, is a direct conversion sensor: it receives and processes X-rays directly. Fewer steps mean a lower risk of diagnostic information loss, sharper and well-contrasted images, even at low doses.





# Your best workflow solution.

Choose the configuration that best suits your needs.  
The sensor adapts to your work, not the other way around.

Zen-X DCiS streamlines your workflow and integrates seamlessly into your clinic. Through Wireless technology, the sensor interacts with the docking station wirelessly and with minimum power consumption with no impact on quality.

In just a few seconds the image is available on the monitor to be shared with the patient and colleagues.

With iRYS you can browse through images, calibrate them or use pre-settable filters.

The software allows pairing with the dentition chart and has predefined layouts to quickly store and view the X-rays.

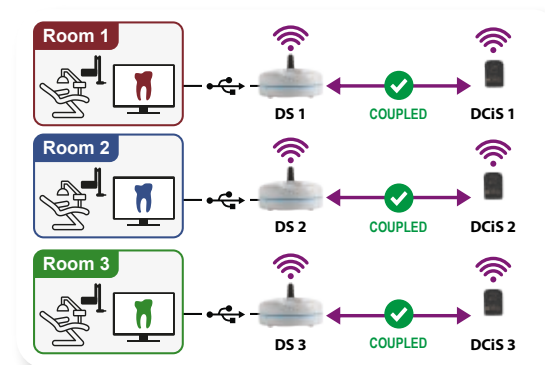
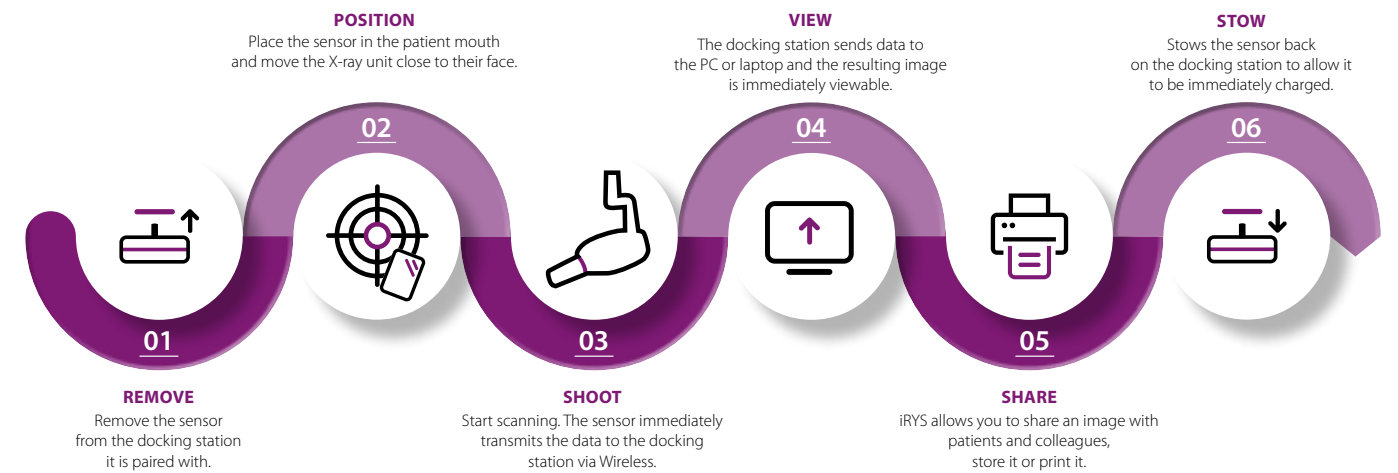
A preferred combination of sensors and docking station can also be chosen.

Zen-X DCiS is made to look like you!

**It fits!**

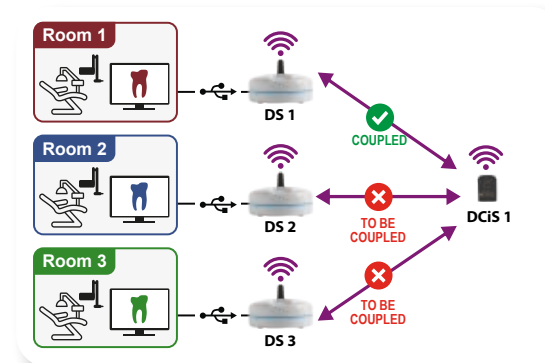


- Images available immediately
- Several possible configurations
- Energy saving



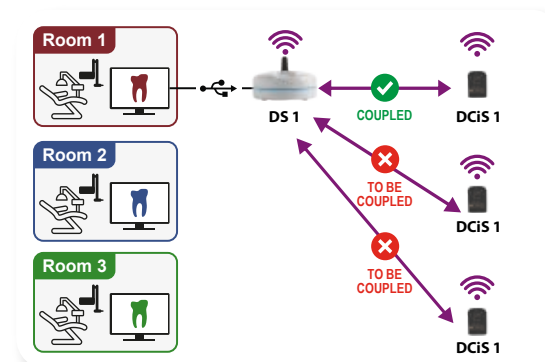
## WORKFLOW A 1 to 1 pairing.

Each sensor interacts with its own docking station. Simultaneous data transmission is also possible.



## WORKFLOW B 1 to many pairing.

A single sensor interacts with multiple docking stations. The sensor can interact with only one docking station at a time.



## WORKFLOW C Many to 1 pairing.

Several sensors interact with a single docking station. Transmission can occur from only one sensor at a time.

# Optional accessories.

Add the alignment system designed for Zen-X DCiS.  
Choose where to keep the docking station.  
Optimized ergonomics and maximum user-friendliness.

Alignment system that facilitates positioning.  
No extra bulk for the sensor profile which is therefore minimally invasive in the patient’s mouth for superior comfort.  
The system allows the X-ray unit to be brought closer to the patient’s face, focussing the X-ray emission only on the area to be examined.  
A special kit allows you to install the docking station on the wall, freeing up workspace.  
**It’s that easy!**

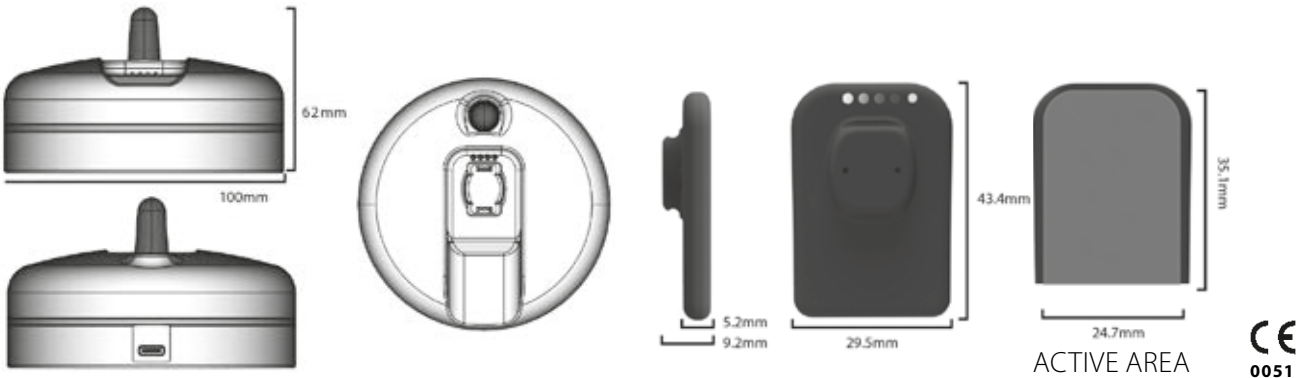
- Minimally invasive in the mouth
- Easy positioning
- Optimal alignment
- Wall fixing of the docking station



# Technical specifications.

DIMENSIONS	
Sensor size	2
Sensor footprint	43.4 mm (height) x 29.5 mm(width)
Sensor thickness	5.2 mm (9.2 mm considering the battery housing hub)
Active area	35.1 mm x 24.7 mm
Docking station	100 mm (diameter) x 62 mm (height)
USB lead length	2 m (supplied to connect docking station to PC/laptop)
IMAGE ACQUISITION	
Pixel matrix	1350 x 950 (1,282,500 pixel)
Detector	Single-crystal direct-conversion silicon / CMOS
MTF (Modulation Transfer Function)	> 70% @ 5 lp/mm, > 40% @10 lp/mm
Exposure parameters	0.1-0.5 s, 60-70 kV, 6/8 mA, 20 cm (8") cone
Wireless image transmission time	Less than 10 s under optimal working conditions
SENSOR TECHNICAL SPECIFICATIONS	
Internal battery	Rechargeable lithium ion (capacity 19 mAh)
Degree of protection	IP 67 (Guaranteed against liquid or dust infiltration)
Integrated RAM memory	4 MB (maximum 1 preservable image)
Image transmission technology	Wireless
Wireless operating distance	Up to 2.5 m from docking station
Compatibility with X-ray generators	Wall-mounted or cart (both AC and DC): 2-10 mA and 60-70 kV. Portable: 2-10 mA and 60-70 kV.
Complete recharge time	3.5 h (allows acquisition of 140* consecutive images, with a 40 s pause between two examinations)
Minimum advisable recharge time	15 minutes (allows acquisition of 19* consecutive images, with a 40 s pause between two examinations)
SOFTWARE	
Acquisition software (for PC)	iCapture with dedicated filters for third party software
Image management software (for PC)	iRYS (complies with ISDP®10003:2020 as per EN ISO/IEC17065:2012 certificate number 2019003109-2)
Supported protocols	DICOM 3.0, TWAIN, VDDS
DICOM nodes	IHE compliant (Print; Storage Commitment, SR document; WorkList; MPPS; Query/Retrieve)
MINIMUM SYSTEM REQUISITES	
Supported operating systems	Microsoft® Windows® 10 Pro 64 bit - Windows® 11 Pro 64 bit
Processor	6th generation Intel i5 or equivalent
Hard disk	Intel Core i3, 10th generation (or higher)
RAM	4 GB (8 GB or superior recommended)
Graphics card	3D VideoCard 1 GB RAM (DirectX 11 / OpenCL v1.2 or later support)
Display	1920x1080 pixel 24bit RGB Full HD
COMMUNICATION INTERFACES	
Docking station connection port	USB-C
PC/laptop connection port	USB-A
Power supply	+5V ± 10%
Input power	2,5 W

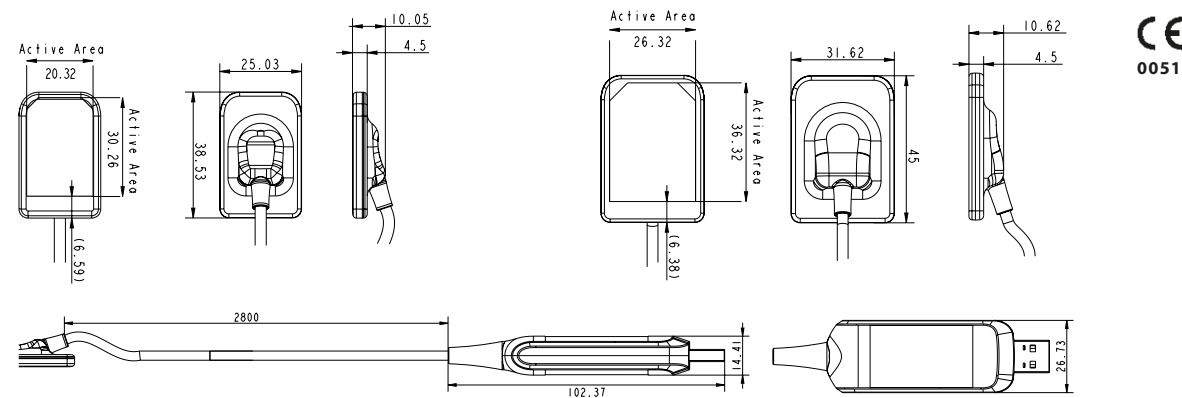
\*Values susceptible to a reduction in performance due to effective battery life (the battery must only be replaced by qualified technicians).





# Technical specifications.

INTRAORAL SENSORS	Size 1	Size 2
External dimensions (mm)	38.5 x 25	45 x 31.6
Thickness (mm)	4.5	4.5
Pixel matrix	1500 x 1000	1800 x 1300
Pixel size (µm)	20	20
Max. resolution (lp/mm)	25	25
Grey level depth	16-bit acquisition - max 65,535 grey levels	
Sensor technology	APS CMOS	
Scintillator technology	Direct deposition CsI (Caesium Iodide)	
Case protection rating	IP68 (Guaranteed against liquid or dust infiltration)	
Compatibility with X-ray generators	Any AC or DC technology X-ray generator with values in the 60 – 70 kV and 1-8 mA range and precision control of exposure times	
Connectivity	Direct USB to PC	
Acquisition software (for PC)	iCapture with dedicated Zen-X E image filters for third-party software and for automatic saving of RX DC exposure parameters on PC	
Image management software (for PC)	iRYS (complies with ISDP®10003:2020 as per EN ISO/IEC17065:2012 certificate number 2019003109-2)	
Supported protocols	DICOM 3.0, TWAIN, VDDS	
DICOM Node Connectivity	IHE compliant (Print; Storage Commitment; SR document; WorkList; MPPS; Query/Retrieve)	
X-ray log	iRYS feature to associate exposure parameters with the X-ray images of each ex-amination	
Minimum system requisites		
Supported operating systems	Microsoft® Windows® 10, 11 (Professional 64 bit)	
Processor	Intel Core i3 or later	
RAM	4 GB (8 GB recommended)	
Graphics card	Discrete 3D Video Card or integrated GPU	
Display settings	1280 x 1024; 1344 x 768 or greater, 16 million colours	
Port	USB 2.0 or later versions	
Power supply	Use a power supply with suitable power for the video board in use	



[www.myray.com](http://www.myray.com)

Data subject to changes without prior notice. 03/2024 MZENXEGB231S00  
According to the regulations in force, some products and/or features may have different availability and characteristics in areas outside of the European Union. Please contact your local distributor.



**Zen-X E**  
Direct USB "Series E"  
intraoral sensor



**BU Medical Equipment**  
**Plant** - Via Bicocca, 14/c - 40026 Imola - Bo (Italy) tel. +39 0542 653441 - fax +39 0542 653555  
**Headquarters** - Cefla s.c. Via Selice Provinciale, 23/a - 40026 Imola - Bo (Italy) tel. +39 0542 653111 - fax +39 0542 653344  
**Cefla Medical North America**  
6125 Harris Technology Blvd. - Charlotte, NC 28269 - Ph: 704 598 0020 - [www.ceflamedicalna.com](http://www.ceflamedicalna.com) - [info@cefladental.com](mailto:info@cefladental.com)

# Zen-X E.

The Enhanced sensor that takes performance in your practice to the next level. High resolution, extreme user-friendliness and maximum patient comfort.

Optimise work with the new Zen-X E intraoral sensor.

Thin and comfortable for the patient, easy to handle for dentists and assistants.

High quality images - even at low X-ray doses - ensure clear diagnosis and effective treatment.

Discover the features that allow Zen-X E to deliver an improved patient experience and smoother workflows.

**So tiny. So great.**

- Ergonomics and comfort
- Easy positioning
- Highly detailed images
- Liquid-proof



Light and compact  
**IP68** certified for  
protection against  
liquids and dust.

## HD QUALITY

More sensitive than the other wired sensors in the range, Zen-X E guarantees extremely detailed images.

## ERGONOMICS

Rounded corners and a thin profile ensure comfortable insertion in the oral cavity.



## PLUG&PLAY

Work anywhere: the 3-meter long cable maximises freedom of movement and provides immediate USB connection.





# Designed to streamline work.

Zen-X E optimises ergonomics, improving both the patient experience and examination accuracy.

Just 4.5 mm thick and featuring rounded corners, Zen-X E minimizes patient discomfort and streamlines workflows. Available in two sizes, both with an extensive active area to maximise the view with a single exposure. The Plug & Play system allows immediate display of the image on a PC or laptop, minimising appointment times. With Zen-X E you can count on accurate X-ray imaging for a wide range of exams, with special positioners ensuring precise framing. With clear advantages for both the patients and the practice.

**This is the way.**

- Extensive active area
- Flexibility
- Reliability
- Plug & Play



## LOW BULK, LARGE ACTIVE AREA

Available in 2 sizes, Zen-X E optimizes sensor bulk for both adult and child patients thanks to an active area that almost reaches the edge.

The sensor adapts to the anatomy of the oral cavity, reconciling the dual need for comfort and a clear diagnosis, with special positioners maximising exam accuracy.



## PROTECTED

The IP68 certified Zen-X E provides resistance to liquids and dust above the market average.

An aluminium layer protects it from knocks and accidental falls, as does the special design of the internal layers that convert the X-ray beam into the final image.



## EXTRA-LONG PLUG & PLAY CABLE

The 3 metre long cable ensures excellent freedom of movement. Take Zen-X E anywhere, take advantage of direct USB connectivity to your PC or laptop.

The on-cable stabilizer reduces energy consumption, keeping the temperature of the sensor in the oral cavity under control.

Furthermore, there's no need to put the device on standby and interrupt workflows.



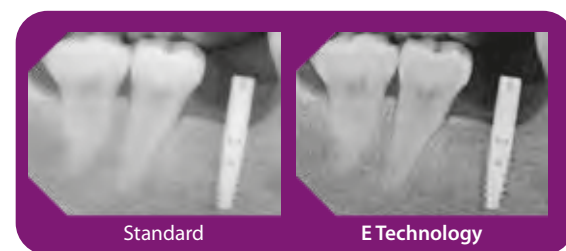
# Multiply opportunities.

Advanced Zen-X E hardware and software boost diagnostic capacity and let you process/browse images with ease.

More sensitive than its predecessors, Zen-X E provides - dosage remaining equal - excellent definition, allowing you to see details such as coronal micro-fractures; this outstanding detail is maintained even at low doses. User-friendly, customisable iCapture software quickly transfers captured images to your computer. Once transfer has been completed, MultiIMAGE technology lets you view up to 5 different images with a single scan. Last but not least, the processing software lets you share X-rays in real time with the patient or colleagues.

**Better and better.**

- High-sensitivity sensor
- MultiIMAGE technology
- PiE (Powerful image Enhancer)
- Proprietary iRYS software



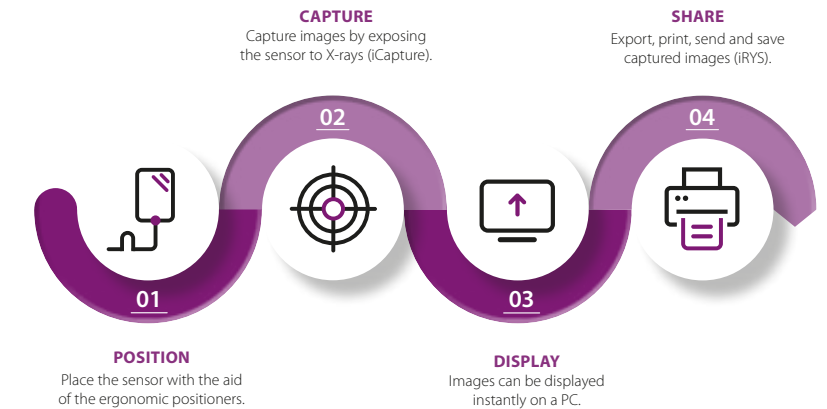
## MORE DEFINITION AT LOW DOSE

Low X-ray doses and sharper images ensure a clear diagnosis.



## OPTIMAL WORKFLOW

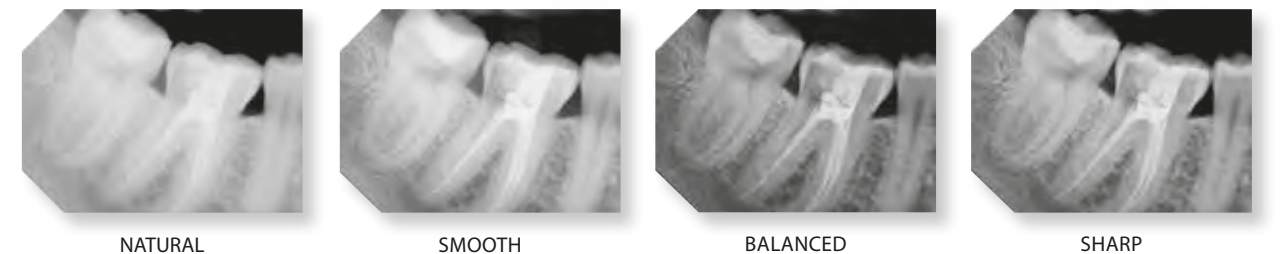
Ergonomic positioners allow optimal placement of the sensor, which is always ready for exposure. Following acquisition, images are loaded directly onto the PC. They can then be saved, consulted and shared via iCapture software (TWAIN), all-in-one iRYS software (DICOM) or with a free image viewer or iPad app before being printed or sent via e-mail.



## PiE (Powerful image Enhancer)

MultiIMAGE technology applies proprietary PiE algorithms, optimized for Zen-X E, to capture, display and share sets of (up to 5) images. Each image highlights a different anatomical detail by modulating sharpness and contrast.

New set of filters to highlight all the details necessary for different clinical requirements.



**Natural image:** pure, thanks to the **RAW filter** which does not apply any processing-related alterations.

**Smooth image:** preserves areas at risk of darkening thanks to the **Soft Tissues Preserving filter** that enhances low-density tissues.

**Balanced image:** perfect for most applications, thanks to the **Default filter** that balances contrast and noise.

**Sharp images:** small carious lesions are more visible with the **High Details filter** that optimises contrast to emphasise image details.

## iRYS

The sensor interfaces smoothly with the iRYS software installed on the PC. This provides rapid image browsing, calibration, pre-settable filters, association with the dentition chart and automatic predefined layouts that let dentists consult an individual patient's X-rays quickly.



# Multiple Images for every level of detail.

Latest-generation Zen-X image processing software aims to improve diagnostics. With outstanding image resolution and a user-friendly interface, Zen-X makes image reading easier to meet your needs more effectively.

Equipped with iRYS software, Zen-X now offers the most advanced, versatile image processing filter pre-setting on the market. Users can select which filters to use from among the pre-set families and define any further customisations according to their visual or diagnostic preferences. All filters are accessible from the iRYS image display window, where users can decide which ones to apply automatically. This provides individual dentists with a customised comfort zone for every appointment.

### MultiIMAGE

This original MyRay function is designed to meet the real needs of dentists like you. By using proprietary PiE (Powerful image Enhancer) algorithms optimised for the Zen-X sensor, this function lets dentists simultaneously capture, display and share a set of up to 5 images. Each image is the result of a different type of improvement designed to highlight various anatomical details with different levels of sharpness and contrast, ensuring dentists can diagnose better.



## Technical specifications.

SENSOR: X-VS	SIZE 1 - REGULAR	SIZE 2 - LARGE
External dimensions (mm)	38.9 x 24.9	41.9 x 30.4
Thickness (mm)	5.3	5.7
Pixel matrix	1500 x 1000	1700 x 1300
Pixel size (µm)	20	20
Maximum resolution (lp/mm)	25	25
Grey levels depth	14-bit acquisition - 16384 maximum grey levels	
Scintillator technology	CsI (Cesium Iodide) with micro-columnar structure	
Direct exposure protection	FOP (Fibre Optics Plate)	
Protection rating	IP 67 (Guaranteed against liquid or dust infiltration)	
Compatibility with X-ray generators	Any AC or DC technology X-ray generator with kV values in the 60 – 70 kV range and precision control of exposure times	
Connectivity	Direct USB to PC	
Image capture software (for PC)	iCapture with dedicated filters for third party software	
Image management software (for PC)	iRYS (as per ISDP©10003:2020 in compliance with EN ISO/IEC 17065:2012 - certificate number 2019003109-2) and iPad iRYS viewer app (free)	
Supported protocols	DICOM 3.0, TWAIN, VDDS	
DICOM nodes	IHE compliant (Print; Storage Commitment, SR document; WorkList; MPPS; Query/Retrieve)	
Minimum system requisites		
Supported operating systems	Microsoft® Windows® 10 Professional 64 bit	
Display settings	1280x1024; 1344 x768 or greater, 16 million colours	
Port	USB 2.0 or subsequent	
Power supply	5 V DC, 500 mA (via USB)	



[www.my-ray.com](http://www.my-ray.com)



### BU Medical Equipment

**Plant** - Via Bicocca, 14/c - 40026 Imola - Bo (Italy) tel. +39 0542 653441 - fax +39 0542 653555

**Headquarters** - Cefla s.c. Via Selice Provinciale, 23/a - 40026 Imola - Bo (Italy) tel. +39 0542 653111 - fax +39 0542 653344

**Cefla North America**, Inc. 6125 Harris Technology Blvd. Charlotte, NC 28269 - U.S.A. Toll Free: (+1) 800.416.3078 Fax: (+1) 704.631.4609

09/2023 MZENGGB201500  
Data may be subject to change without notice.  
According to the standards in force, in extra-EU areas the availability and specifications of some products and/or characteristics may vary. Please contact your local distributor for further information.



**Zen-X**

HD direct USB X-ray Sensor



# Real time diagnostics.

High definition, immediacy, reliability and ergonomics.  
Zen-X offers all the advantages of real-time digital technology  
to obtain and share high quality images with ease.

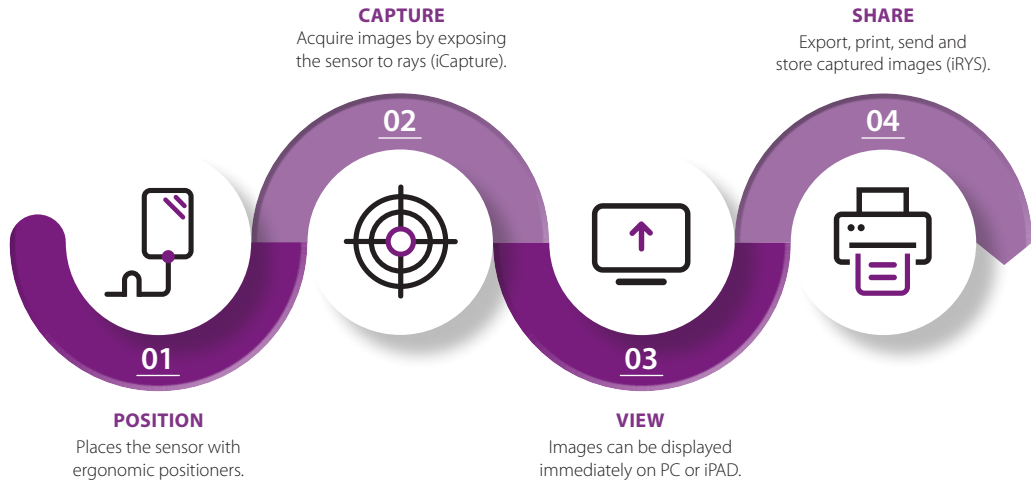
Capture and consult the best high definition intraoral images immediately. Zen-X saves time and make communication with patients more effective thanks to automatic acquisition and USB direct plug-and-play connection.

Available in two sizes, it features ergonomic design with smoothed edges, rounded corners and a flexible lead, maximising both active area and positioning comfort.

Made of extremely hard-wearing materials of the highest quality, it is compatible with all intraoral X-ray generators.

**The precision of modern technology.**

- Easy, fast, portable, real-time
- Maximum active area with optimal ergonomics
- Resistant to impact, dust and liquids
- Plug-and-play with iCapture software
- All-in-one iRYS software - Free Viewer and iPad app



## OPTIMAL WORKFLOW

Ergonomic positioners allow optimal placement of the sensor, which is always ready for exposure. Following acquisition, images are loaded directly onto the PC. They can then be saved, consulted and shared via iCapture software (TWIN), all-in-one iRYS software (DICOM) or with a free image viewer or iPad app before being printed or sent via e-mail.



## ERGONOMIC DESIGN

Thin profile,  
rounded corners  
and flexible lead.  
Maximum active area.

## HD SENSOR

Multi-layer sensor  
(CsI + FOP + CMOS),  
high definition technology.



## RELIABLE AND HARD-WEARING

Resistant to dust and liquids,  
IP 67 certified.

## DIRECT USB

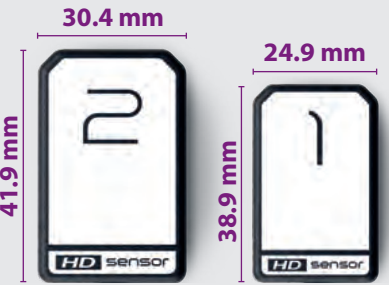
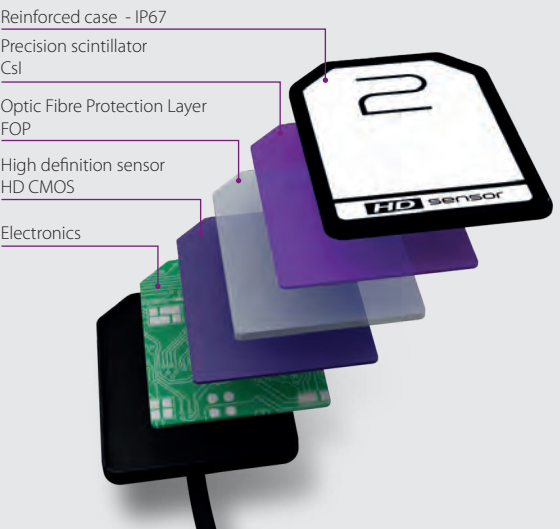
USB direct plug-and-play  
connection to display  
Real-Time images.

## LATEST-GENERATION HD MULTI-LAYER SENSOR

The Cesium Iodide (CsI) scintillator intercepts the X-ray beam and converts it into visible light while preserving image quality.

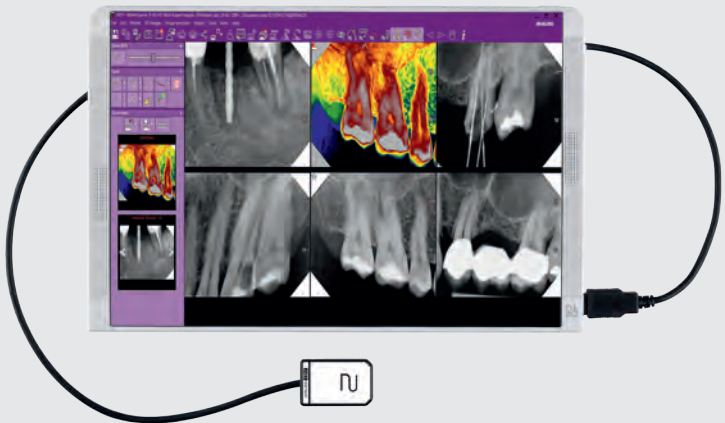
The layer of fibre optics (Fibre Optics Plate) collimates the radiation onto the sensor and protects it against direct X-ray penetration.

The high definition acquisition device with 20 µm cells (HD CMOS) converts the light into a digital image which is then processed by the on-board electronics, ready to be transferred to a USB port.



## FOR ALL YOUR NEEDS

Whatever your task, Zen-X will help you complete it.  
Available in two sizes, it adapts to all types of examination.



## IRYS, EASY COMMUNICATION

The sensor integrates perfectly with the iRYS software installed on the PC and the 2D image viewer for iPad; iRYS is the all-in-one solution for 2D and 3D diagnostics, communication and intraoral imaging management. Provides simple yet comprehensive processing tools: fast browsing of captured images, calibration and pre-settable filters, association with the dentition chart and automatic pre-definable layouts with which to save and consult patient X-rays relative to different treatment sessions.