#### www.acteongroup.com

All products in this catalogue must only be used by dental professionals. Medical devices presented in this catalogue are health products stamped with the CE marking, according to MDD regulation. The manufacturer of these medical devices are SOPRO® and DE GOTZEN®, except X-Mind prime that is manufactured by Villa Sistemi Medicali and distributed by ACTEON®. Read carefully the instructions in the leaflet supplied with the product. Medical Devices marketed by SOPRO® and DE GOTZEN® are not reimbursed by health insurance organizations. Please read carefully the instructions on the labelling or in the user manuals. Updates are available on the site: www.acteongroup.com

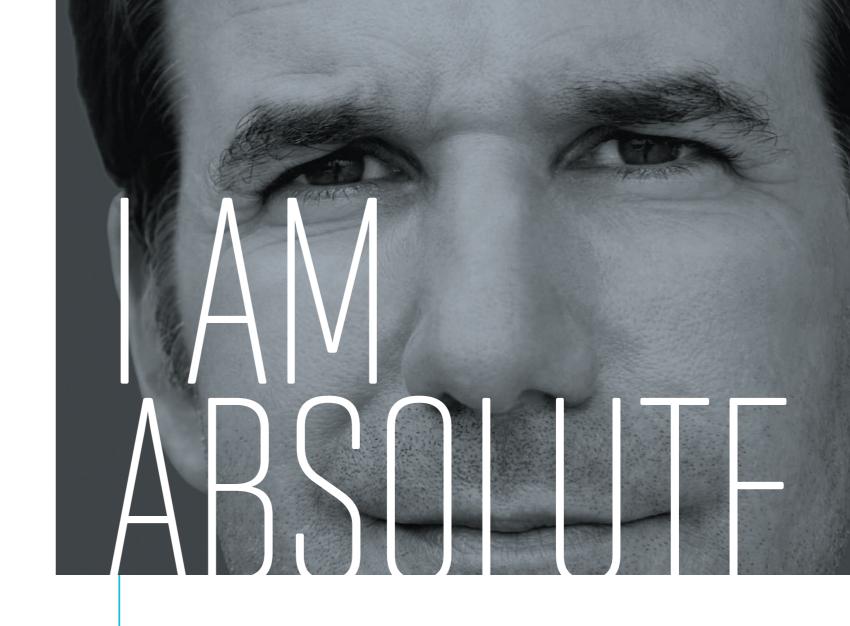
For more information, please contact:
SOPRO S.A. | A company of ACTEON Group
ZAC Athélia IV | Avenue des Genévriers | 13705 LA CIOTAT cedex | FRANCE
Tél + 33 (0) 442 98 01 01 | Fax + 33 (0) 442 71 76 90
E-mail: info@sopro.acteongroup.com | www.acteongroup.com



# ACTEON INNOVATIVE IMAGING

Digital medical imaging has significantly contributed to the improvement of diagnoses and the widespread use of less invasive procedures. Over the past 15 years, ACTEON® has committed to channeling its efforts into contributing to improve the accuracy of surgical procedures, and to reduce the radiation doses emitted. Through the development of ever more sophisticated yet intuitive 2.0 software packages, our R&D teams are able to innovate on a daily basis. In our permanent pursuit of excellence, we are proud today to present our latest innovations in this brochure.

## MORE INVENTIVE LESS INVASIVE



## IMAGING CATALOGUE









# ACTEON INNOVATIVE IMAGING

It is with great pride and enthusiasm that we bring our new Acteon Imaging catalogue to you, based on the latest cutting edge technological progress!

Our most recent products, PSPIX<sup>2</sup> and Trium, are presented in detail. Thanks to the extensive expertise of our research & development teams, they offer unique solutions featuring outstanding image quality. These innovations are due to a combination of in-depth knowledge of the practitioner's needs in terms of digitalisation and on the latest technological advancements in computational optics.

PSPIX<sup>2</sup> is the first personal digital scanner developed to equip any practice. It is a radical breakthrough which is both user-friendly and combines a unique image quality with an attractive design.

With Trium, the new reference in 3D dental image quality and its ingenious 3D image reconstruction algorithm, ACTEON has entered a new phase in diagnostic accuracy.

We are confident that these two easy-to-use products will meet all your hopes and expectations. They will become essential to your practice and be revolutionary for their time.

As part of our commitment to our customers, we have rationalised our internal organisation and are pleased to announce the presence of Acteon Imaging technical experts offering you support and advice and covering all the countries where our products are sold.

With ACTEON, the 21th century is here!

Marie-Laure POCHON

President - CEO



| INTIMOTAL CAMILIAS                               |
|--|
| ■ SOPRO 617 p 6<br>■ SOPRO 717 first p 8         |
| DIAGNOSTIC TOOLS                                 |
| ■ SOPROLIFEp 10<br>■ SOPROCAREp 12               |
| DIGITAL RADIOLOGY<br>SENSORS                     |
| SOPIX & SOPIX <sup>2</sup> p 14 SOPIX INSIDE &   |
| SOPIX <sup>2</sup> INSIDEp 16                    |
| DIGITAL RADIOLOGY<br>SYSTEM BY PHOSPHOR<br>PLATE |
| ■ PSPIX²p 18                                     |
| X-RAY GENERATORS                                 |
| ■ X-Mind AC/DCp 20                               |
| X-Mind Unityp 22                                 |
| PANORAMIC  |
| AND 3D IMAGING                                   |
| X-Mind Primep 24                                 |
| X-Mind Triump 28                                 |
| IMAGING SOFTWARE                                 |
| ■ Acteon Imaging Suite p 32                      |
| TECHNICAL<br>SPECIFICATIONSp 34                  |

 $\mathsf{S}$ 

## SOPR**Ú617**

## COMMUNICATE WITH YOUR PATIENTS: USE AN IMAGE, THE KEY TO EDUCATION AND CASE ACCEPTANCE

SOPRO® 617 is easy to use for patient communication, and a great asset for case acceptance.

Video

COMPATIBLE

#### Simplicity in the palm of your hand

- · Rounded shape and thin distal part for maximum accessibility and unrivalled patient comfort
- 05° angle of view for better exploration of distal areas
- Fixed focus with large depth of field, providing high-quality images
- Ease of use: point and shoot
- Freeze the image with a simple slide over the SOPRO Touch



Intraoral







Speak the same language as your patient!



## MACROVISION REVEALS WHAT WAS ONCE INVISIBLE

#### Magnification of the image up to 115 times\*

- Large depth of field from extraoral to macrovision
- · Exceptional image quality provided by a highl sophisticated optical system
- Extremely small camera head for easier access
- Successfully capture images with a simple glide over the SOPRO® touch high quality images



*Infiltration of the metallic ions* 



Infiltrated occlusal groove



#### See the infinitely small



Dental cavity preparation





Cervical lesion

#### Improve your clinical performance

development of small lesions.

#### Take a more detailed look into dental cavity preparation and be more accurate during treatment.

**Enhance your vision during examination** 

See details otherwise not visible to the naked eye. Closely monitor micro fractures and the





Video COMPATIBLE SOPRO® 717 reveals micro fissures, infiltrations, lesions, everything that is not visible with the naked eye.

Cracked tooth

## SOPRULIFE

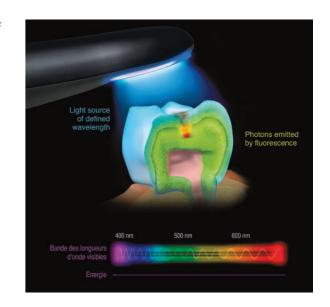
## HIGHLIGHTS DECAY AND PROMOTES MINIMALLY INVASIVE TREATMENT

SOPROLIFE® is a revolutionary camera that differentiates between healthy and infected tissue facilitating less invasive treatments.

#### The power of autofluorescence

- **DIAGNOSTIC aid mode**: identify the development of occlusal and proximal carious lesions.
- TREATMENT aid mode: perform minimally invasive treatment by preserving healthy tissue.
- **DAYLIGHT mode**: from portrait to macrovision, obtain sharp images with the large depth of field.

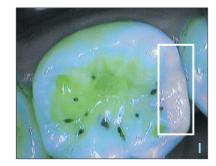
**SOPROLIFE®** offers two different visions: white light (daylight) and blue light (fluorescence).



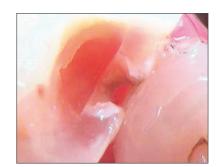
#### Enhance clinical examination capabilities and perform less invasive treatment



DAYLIGHT mode ► Initial situation



DIAGNOSTIC aid mode ► Demineralization over the mesial marginal



DAYLIGHT mode Opened cavity



TREATMENT aid mode ▶ Demineralized enamel and infected tissue



TREATMENT aid mode ▶ All the infected tissue has been removed



SOPRU LIFE



Video COMPATIBLE

## SOPRUCARE

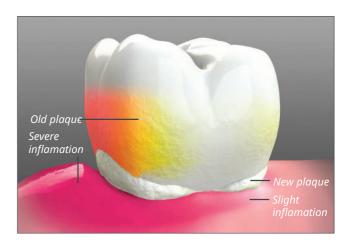
## SELECTIVE CHROMATIC AMPLIFICATION

DIFFERENTIATES THE COLOUR OF TISSUE AND REVEALS ORAL HYGIENE PATHOLOGIES

#### 3 needs, 3 modes

- **PERIO mode**: highlight plaque, calculus, and gingival inflammation.
- **CARIO mode**: caries are detected as red, surrounding tissue is displayed in black and white.
- DAYLIGHT mode: communicate more effectively with your patient and see details that are not visible with the naked eye.

SOPROCARE® is an unparalleled communication tool in the dental practice!



Chromatic mapping representing the characterization of tissues in PERIO mode

#### Control hygiene evolution

#### **BEFORE TREATMENT**



DAYLIGHT mode
► Initial situation



PERIO mode
Initial situation



DAYLIGHT mode
► One week after treatment

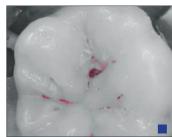


PERIO mode ► One week after treatment

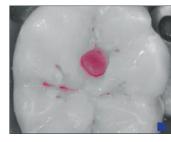
#### Enhance clinical examination capabilities



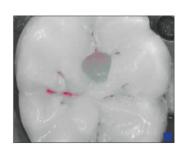
DAYLIGHT mode
Initial situation



CARIO mode
Carious lesion revealed



CARIO mode
► Infected tissue



CARIO mode

▶ all the infected dentine has been removed





Video COMPATIBLE With the push of a button, SOPROCARE® instantly and easily highlights caries, plaque, calculus and gingival inflammation.

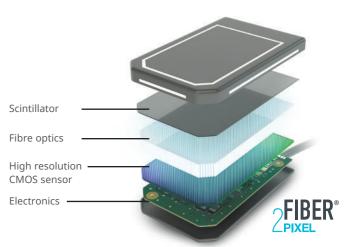
# A SUCCESSFUL X-RAY EVERY TIME WITH MINIMAL EXPOSURE TO RADIATION



Equipped with ACE technology, the SOPIX SERIES are the unique digital sensors providing you perfect X-ray the first time and every time.

## Striking contrast for a more reliable diagnosis

Thanks to the use of **broad spectrum optical microfibers**, the **different tooth anatomic structures**, such as the bone, roots, pulp... are highlighted with **extreme precision** on the image.



#### Smart design for better comfort

Two sizes are available depending on patient morphology and clinical applications.

**Rounded edges and corners** for improved **patient comfort**. **White side stripes** ensure **high visibility** of the sensor in the dark area of the mouth.



#### No more overexposed images

Available on all SOPIX series sensors, the patented ACE technology freezes the image during acquisition **to protect** it **from over-exposure**.

Acquire perfect image the first time and every time!



**Endodontics** 







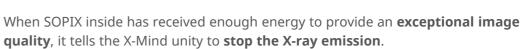
WINDOW COMPATIB

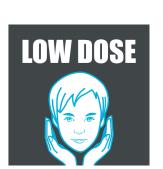


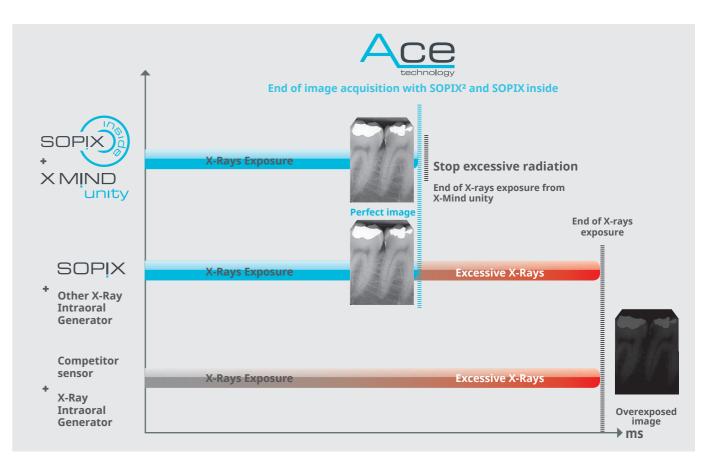
SOPIX<sup>2</sup> inside is directly integrated into the X-Mind unity intraoral X-ray system and makes the protection of the patient our utmost priority.

#### Effective protection for minimal exposure

The patient only receives the necessary dose adapted for their dental morphology, which **protects them from unnecessary exposure**.







#### **Exclusive traceability**

ACTEON Imaging Suite systematically records the **X-Mind unity settings** as well as the **effective dose received by the patient** for each acquisition.

#### Outstanding working comfort

Through direct integration of SOPIX inside into X-Mind unity, **connecting cables are hidden** inside the X-ray unit and the holder places the sensor **safely at easy reach**.



## THE FIRST PERSONNAL

IMAGING PLATE SCANNER



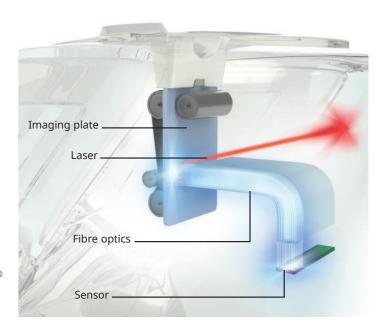
PSPIX<sup>2</sup> provides plate in the PSPIX<sup>2</sup> and let it do the rest!

streamline workflow with images in seconds: drop your imaging

#### Striking contrast for a more reliable diagnosis

Thanks to the use of broad spectrum optical microfibers, the different tooth anatomic structures, such as the bone, roots, pulp... are highlighted with extreme precision on the image.

**Periodontics** 



**7FIBER** 

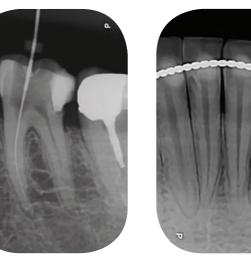
**Endodontics** 





**Orthodontics** 







Improved patient experience with various sizes of thin and flexible imaging plates.

#### The PSPIX<sup>2</sup> is

AFFORDABLE that you can now equip every operatory chair side

**INTUITIVE** that learning to use it is instantaneous

**SMALL** that it takes up a minimal amount of space

**ELEGANT** that it will enhance your dental practice

Mac

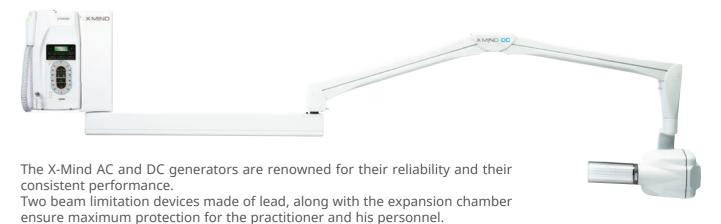


## XMIND DC

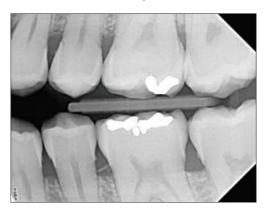
# EASY AND SMART INTRAORAL SYSTEM FOR HIGH QUALITY REQUIREMENTS

With X-Mind AC/DC generators, focus on reliability, simplicity of use and optimal protection.

#### Reliability of the X-Mind™ AC and DC generators



#### Shorter exposure time with X-Mind DC generator



Exposure times with the X-Mind DC generator are reduced when used with digital sensors.

## Programmable user-defined timer

With the X-Mind timer, the micro-processor controlled exposure times are user-defined and programmable. The timer is compatible with digital imaging systems and can control two AC or DC generators.



## X MIND unity



## RELIABLE TECHNOLOGY

THAT REDUCES
RADIATION EXPOSURE



The X-Mind unity generator

has been developed with a refined design, a proven quality and unique technological benefits.

## A sharp and contrasted image

The X-Mind unity has a 0.4 mm focal spot. It has several configurable radiological settings:

#### Notably:

- The anodic voltage (60, 65 and 70 kV)
- The anodic current (from 4 to 7 mA)
- These parameters ensure a sharp and contrasted image





The generator focal spot Y: 0.7 mm

The generator focal spot of X-Mind<sup>TM</sup> unity: 0.4 mm

23



#### Stop excessive radiation with Ace

This technology combined with the X-Mind unity allows the SOPIX inside sensor to stop the generator, thus **avoiding all risk of over exposing the patient and image** as well as unnecessary re-takes of acquisitions.

The patient **only receives the necessary dose**, adapted to their dental morphology.

#### Safety through traceability

The dose received by the patient appears on the timer's screen after each exposure.

With SOPIX INSIDE, this **dose is also recorded** in the patient's ACTEON Imaging Suite file, thus ensuring permanent traceability.



\* Reduction variable according to the patient's morphology.

## XMIND prime

## 3D DIAGNOSIS



24

IS MORE ACCESSIBLE
THAN EVER WITH A
SMART AND COMPACT
SOLUTION



- 3D objects scanning
- Face-to-face positioning
- Zero footprint space
- Wall-mounted solution
- Minimum resolution of 87,5 um
- 3 FOV (85x93; 85x50; 50x50)

## Easily plan your treatment with a digital workflow

Delivered with the intuitive AIS software, X-Mind prime is an essential tool for treatment planning and post-procedure follow-up.

- Draw a panoramic curve
- Trace the mandibular canal and measure the distance between the upper canal boundary and the upper mandibular crest bone
- Select the right implant from a large library
- Print your illustrated and complete implant report in less than a minute.
- You can also scan the patient Appliance with the X-Mind prime 3D scan objects feature and use it for the matching with the patient scan.

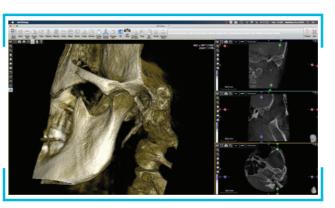


#### Diagnose with the highest quality 2D & 3D images

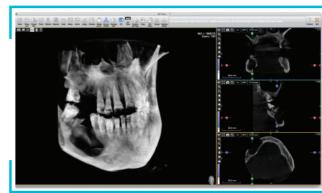
X-Mind prime provides a large numer of applications dedicated to the needs of both specialists and general practitioners.

With a minimum voxel size of 87,5  $\mu$ m, you will get detailed three-dimensional reconstructions, able to highlight the smallest anatomical elements.

TMJ ANALYSIS



CYST ANALYSIS







## XMIND

#### Rely on a complete set of panoramic exams

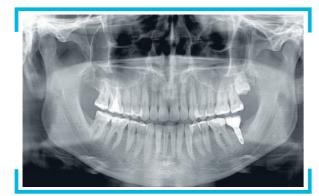
X-Mind prime offers a full set of panoramic exams for both adult and child tailored to meet all your clinical applications :

- Panoramic
- Examination of the temporomandibular joints
- Examination of the maxillary sinuses

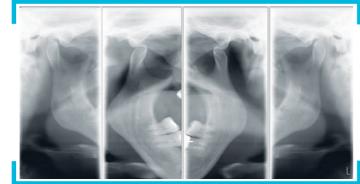
DENTAL PANORAMIC

- Half-panoramic
- Improved orthogonal panoramic
- Detailed frontal dentition
- Low-dose panoramic
- Bite-wing

TEMPOROMANDIBULAR JOINT



Complete imaging of the mandible and maxilla, maxillary sinuses, temporomandibular joints and supporting structures.



Examination can be carried out with the mouth either open or closed.

#### FRONTAL DENTITION



Program that limits the exposure to the front of the

#### **BITF-WIND FXAMS**



Shows single or bite-wing view.



#### Intelligent wall-mounted solution

Compactness is key. X-Mind prime is a space-saving device: with its smart wall-mounted system, it will never get in your way.

Its exceptional light weight (only 62 kg for the 2D configuration), and its reduced size makes X-Mind prime adaptable to fit the narrowest space.

## Position easily and efficiently your patient

Natural face-to-face positioning supported by alignment lasers for correct patient positioning.

X-Mind prime is based on a fix & lift principle. Whether sitting or standing at any height, the telescopic columns can be directly adjusted using the control panel.

Its open space configuration suits all types of patients and is easily accessible for wheelchair users thanks to its zero footprint space.





#### Simple control panel

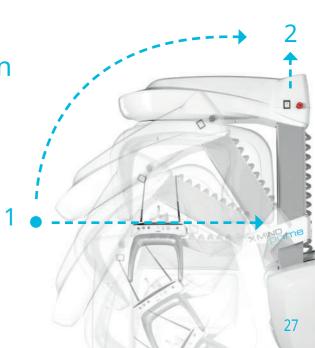
The simplified control panel smartly located below the chin support provides a streamlined and precise patient positioning.

Benefit from an error-free patient positioning thanks to the automated chin rest support recognition.

#### Unmatched speed of installation

X-Mind® prime is ready to install! Delivered completely assembled at your practice, you are all set-up in only one hour.
As simple as 1 box, 1 technician, 2 steps and that's it!

It does not interrupt the daily work and operations of the office, helping you save time.



### XMIND trium

## WITH TRUE LOW DOSE,



GAIN REAL PROTECTION
WITHOUT COMPROMISING
3D IMAGE QUALITY

- Up to 50%\* dose reduction
- 3 in 1 CBCT solution
- Ultra high resolution of 75
- 4 FOV (110x80; 80x80; 60x60; 40x40)
- Powerful artefact reduction filter

Mac

Patented CEPH module

#### Up to 50%\* dose reduction with TRUE LOW DOSE CBCT

True low dose helps to reduce the X-ray dose while preserving a high image quality. The unique True Low Dose solution is possible thanks to:



#### Smart slide movement

X-Mind trium U-arm is sliding closer to the child's head during the exam. This allows to reduce the X-ray dose settings while keeping the exact same image quality as before.

#### BEFORE SLIDE MOVEMENT



AFTER SLIDE MOVEMENT



STANDARD DOSE

CLASSIC LOW DOSE

TRUE LOW DOSE

#### Image enhancing algorithm (coming soon)

With the new powerful algorithm, you can now decrease the X-ray settings with peace of mind. Our True Low Dose algorithm will reveal all anatomical structures on the 3D radiographic scan while on classical Low Dose system, some clinical information can be missing because of the lack of data collected.



90kV - 8mA



70kV - 4mA

70kV - 4mA

#### An outstanding image quality

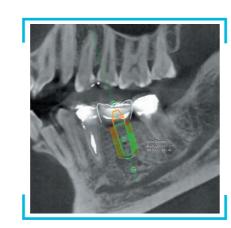
The quality of the diagnosis and endodontic treatments improves significantly with the 75  $\mu$ m resolution of X-Mind<sup>®</sup> trium.

### XMIND trium

#### A reliable assessment of bone density

A precise and detailed analysis of the existing bone volume is highly recommended in order to reduce complications associated with implant placement.

The ACTEON® Imaging Suite 3D software displays the assessment of bone density all around the implant with just one click.



#### Focus on the region of interest

X-Mind® trium offers you a broad selection of field of view, letting you focus on the region of interest for the target diagnosis and reducing the patient's exposure to X-rays:



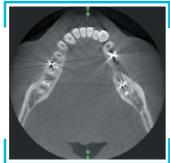


#### An optimal filter for reducing metal artifacts

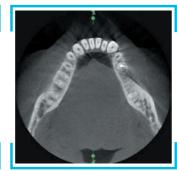
X-Mind® trium is equipped with a dynamic artefact reduction filter to eliminate streaks and dark bands caused by the presence of metal. The image can be freely reconstructed with adjustable filter levels based on the target level of information and the need to cut out artefacts.

The goal is to best isolate the desired information during the examination.

Without filter



With filter



#### Simplified implant panning

Locating and tracing the mandibular canal precisely is the first step in the implant planning procedure. It also measures the distance between the canal boundary and the implant.

3D modelling can then be used to choose the size and shape of the implants in proportion to the patient's morphology based on a substantial and scalable implant library. Better still, you start by putting the crown in place, which serves as a guide for better positioning of the implant.

ACTEON® Imaging Suite gives useful information to assess volume and bone density for implant placement, which can effectively be used to guide the diagnosis and surgical treatment.

ACTEON® Imaging Suite exports imaging data generated by X-Mind® trium scans in **STL format**. This data can be imported into a surgical guide design software.

In less than a minute, you can produce and print a full implant **report**, to illustrate your written report (required). This illustrated report can also help you better inform your patient or a referring dental surgeon.



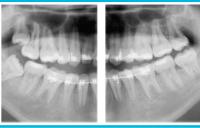
#### **Panoramic** radiography

#### Panoramic with improved orthogonality



X-ray beam perpendicular to the jaw for better orthogonality and to reduce the overlapping of crowns.

TMI sections



**Bitewing** 

A quick bitewing image in one shot

Cephalometric radiography

**Full skull lateral** 



**Posterior anterior** 



Frontal views of the lower portion of the maxillary



Both open and closed mouth image



## EXCEL IN YOUR ANALYSIS IN RECORD TIME, WITH

## THE POWERFUL, INTUITIVE AND HIGH-PRECISION SOFTWARE













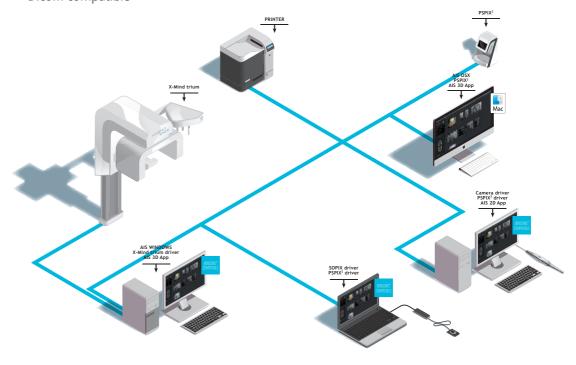


- Superior design
- Clean lines
- User friendly
- Open architecture
- Full integration
- Advanced functionalities

#### Advanced functionality for intuitive navigation

The ACTEON Imaging Suite software offers intuitive navigation and advanced functionality. It alone lets you manage all of your images, from scanning to viewing images from all ACTEON® imaging devices (CBCT, Panoramic, intraoral digital X-ray system, intraoral camera, etc.) and much more.

- Implant planning
- Crown placement
- Mandibular nerve tracing
- Easy navigation in different sections
- Mouse control
- Bone density assessment and volume measurement
- Surface, distance and angle measurement
- Substantial and scalable implant library
- Printed implant report
- Sharing of information on a network
- Cases exported on a CD or USB stick
- Exported in STL format
- Metal artifact reduction filter
- Panoramic and cephalometric image detail optimisation filter
- ENT module
- Virtual endoscope
- Integrates with various patient management software
- Dicom compatible



AIS is not available with PSPIX<sup>2</sup>, SOPIX Series and ACTEON intraoral cameras products in the USA and Canada.

## TECHNICAL SPECIFICATIONS

#### **INTRAORAL CAMERAS**

|                                       | SOPROCARE | SOPROLIFE    | SOPR <b>\)717</b> / | SOPR <b>\)617</b> |
|---------------------------------------|-----------|--------------|---------------------|-------------------|
| Highlight<br>dental plaque            | ✓         |              |                     |                   |
| Highlight<br>gingival<br>inflammation | ✓         |              |                     |                   |
| Reveal caries                         | ✓         | ✓            |                     |                   |
| Macrovision                           | ✓         | ✓            | ✓                   |                   |
| Intraoral image                       | ✓         | $\checkmark$ | ✓                   | $\checkmark$      |
|                                       | ) SOPA    | SOP          |                     |                   |

#### SOPR**\**617

| • High sensitivity | 1/4" CCD                       |
|--------------------|--------------------------------|
| Resolution         | (752x582) PAL ; (768x494) NTSC |
| Definition         | 470 lines                      |
| Sensitivity        | 2 lux                          |
|                    | 8 LED                          |
|                    | fixed focus                    |
|                    |                                |
| SOPR <b>\)717</b>  |                                |

| Freeze Frame wit | h SOPRO Touch or pedal | (option)               |
|------------------|------------------------|------------------------|
| Angle of view    |                        | 80°                    |
| Cable length     |                        | 2.5 m                  |
| Dimensions (mm)  |                        | L. 205 x W. 28 x H. 24 |
| Weight           |                        | 55 o                   |

SOPROCARE · High sensitivity.....

• Resolution.....

Adjustment...

| SOPR <b>\)717</b> /                 |  |
|-------------------------------------|--|
| Resolution  Definition  Sensitivity |  |
| SOPR <b>ULIFE</b>                   |  |
| Resolution                          |  |

..... (752x582) PAL ; (768x494) NTSC

......4 pre-set positions (Extra-oral, Intraoral, One tooth, Macro)

......7 LED (4 white; 3 blue)

|   | • Dimensions (mm)   |
|---|---|
| 1/4" CCD<br>68x494) NTSC<br>e Mode: 4 LED<br>e-set positions<br>tooth, Macro) | Freeze Frame with SOPRO Touch or pedal                              |
| 1/4" CCD<br>68x494) NTSC  | • Freeze Frame with SOPRO Touch or pedal(option) • Angle of view70° |

• Freeze Frame with SOPRO Touch or pedal....

· Angle of view.....

• Cable length .....

• Cable length...

• Dimensions (mm) ....

#### **DOCKING STATIONS**



#### Mini Dock USB2

- One digital USB 2.0 output
- Dimensions (mm): L. 64,5 x W. 26 x H. 11
- Weight: 97 g.



#### Mini Dock U-USB2

- Power Supply: 5 VDC (from USB port)
- Power consumption: 2.5 VA
- One digital USB 2.0 output
- Dimensions (mm): L 48 x W 48 x H 30
- Weight: 22g

#### PSPIX<sup>2</sup>

#### SYSTEM

| Resolution                       | 20 lp/mm                    |
|----------------------------------|-----------------------------|
| Scan Time (fast mode)            | 1,6s - 2,7s                 |
| Scan Time (high definition mode) | 2,1s - 3,6s                 |
| Connection                       | Ethernet RJ-45              |
| • Dimensions                     | L. 154 x D. 204 x H. 193 mm |
| • Weight                         | 2,6 kg                      |
| Operating voltage                | 100 - 240V ~ 50 - 60 Hz     |

#### **IMAGING PLATES**

| Dimensions IP Size 0                 | .22 x 35 mm |
|--------------------------------------|-------------|
| Dimensions IP Size 1                 | .24 x 40 mm |
| Dimensions IP Size 2                 | .31 x 41 mm |
| Dimensions IP Size 3                 | .27 x 54 mm |
| Dimensions IP Size 4 (3 x IP Size 3) | .69 x 54 mm |



#### SIZE 1

| External dimensions | 25 x 39 mm                       |
|---------------------|----------------------------------|
| Active surface area | 600 mm <sup>2</sup> (20 x 30 mm) |
| Number of pixels    | 1.50 million                     |
| SIZE 2              |                                  |
| External dimensions | 31 x 42 mm                       |
| Active surface area | 884 mm <sup>2</sup> (26 x 34 mm) |
| Number of pixels    | 2.21 millions                    |

#### **SYSTEM**

| · Technology                                  | CMOS + scintillator+ optic fiber |
|---|----------------------------------|
| Pixel size                                    | 20 μm x 20 μm                    |
| Theoretical resolution                        | 25 lp/mm                         |
| Connection                                    | USB 2.0                          |
| Total cable length for SOPIX <sup>2</sup> /SO | PIX 3.70 m                       |
| Sensor cable length for SOPIX <sup>2</sup> II | NSIDE/SOPIX INSIDE 0.70 m        |

34 35

... 2,5 m

#### **WORKSTATION CONFIGURATION**

#### WINDOWS® MINIMUM CONFIGURATION REQUIRED

| Operating system             | Windows® 7  |
|------------------------------|---|
| • Processor                  | Quadcore 2.6 Ghz  |
| • RAM                        | 4 GB  |
| Hard disk                    | 300 GB  |
| USB ports                    | 2 USB 2.0 Hi-Speed ports                                |
| • Graphic card OpenGL 2.1 or | better alternatively DirectX 9 or<br>11 Graphics Device |
| USB Chipset                  | Intel® or NEC® / RENESAS®                               |
| Screen resolution            | 1600 x 1024   |
| Ethernet hoard               | 100 Mhns - 1 Ghns                                       |

| MAC® MINIMUM CONFIGURATION REQUIRED |  |
|-------------------------------------|--|
| • Computer M                        | acBook <sup>®</sup> Pro 13.3" or iMac <sup>®</sup> 21.5" |
| Operating system                    | 10.12 Sierra   |
| Processor                           | Quadcore 2.6 Ghz   |
| • RAM                               | 4 GB   |
| Ethernet board                      | 1 Gbps   |

#### WINDOWS® RECOMMENDED CONFIGURATION

| • Operating systemWindows® 10                                    |
|--|
| • Processor:Quadcore 2.6 Ghz+                                    |
| • Ram:   |
| • Hard disk  |
| • USB ports4 USB2 Hi-Speed ports                                 |
| • Graphic cardDedicated graphics card with at least 1 GiB memory |
| $\bullet$ USB Chipset Intel® or NEC® / RENESAS®                  |
| • Screen resolution1920 x 1080 for optimal planning or better    |
| • Ethernet board   |

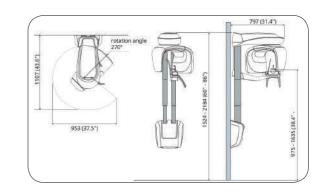
#### MAC® RECOMMENDED CONFIGURATION

| Computer         | iMac® 27″         |
|------------------|-------------------|
| Operating system | 10.14 Mojave      |
| Processor        | Quadcore 2.6 Ghz+ |
| • RAM            | 8 GB              |
| • Ethernet board | 1 Gbps            |

For Yosemite and El Capitan operating systems, a  $\mathrm{Mac}^{\mathrm{@}}$  computer from 2013 or later is required.

|                           | X MİND AC   | X WİND DC                                  | X MIND unity           |
|---------------------------|---|--|------------------------|
| Classification            |   | Electromedical equipment, Class 1 type B   |                        |
| Supply voltage            | 115 V / 220 V / 230 V - monophase 50/60 Hz  | 115 - 230 V - 50/60 Hz                     | 100 – 240 V            |
| Power absorption at 230 V | 0,8 kVA   | 1,4 kVA                                    | 0,85 kVA               |
| X-ray tube voltage        | 70 kV   | 60-70 kV                                   | 60kV / 65kV / 70kV     |
| Anodic current            | 8 mA  | 4 - 8 mA                                   | 4-7 mA                 |
| Focal spot                | 0,7 mm  |  | 0,4 mm                 |
| Total filtration          | Equivalent to 2.3 mm Al at 70 kV  |  | > 2.2 mm Al at 70 kV   |
| Rayonnement de fuite      | < 0,25 mGy / h  |  |                        |
| Technology                | AC  | DC   | High frequency DC      |
| Timer                     | from 0.08 to 3.2 seconds  | from 0.02 to 3.2 seconds                   | from 0.02 to 2 seconds |
| Weight of the head        | 9 kg  | 5,5 kg                                     | 5.5 kg                 |
| Total weight              | 28 kg   | 25 kg                                      | 23 kg                  |
| Options                   | Circular cone ø 60 mm<br>Rectangular cone 45 x 36 mm<br>Arm   |  | 31 cm (12")            |
|                           | Unit armMobile  | Height 1.10 m, length 0.80 m, width 0.70 m |                        |
| Mobile stand for Unity    | Second control button with remote exposure switch<br>RX indicator light for external use<br>Adaptable mounting wall plate (only for X-MIND unity)<br>Mobile stand (only for X-MIND unity) |  |                        |

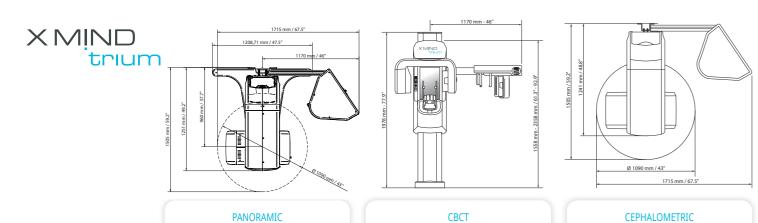




|                  | X-Mind prime 2D   | X-Mind prime 3D  |  |  |
|------------------|---|--|--|--|
|                  | X-RAY SOURCES   |  |  |  |
| Tube type        | D-058 (Toshiba)   | OPX 105-12 (CEI)   |  |  |
| Total filtration | 2.0 mm Al eq. @ 70 kVp  | ≥ 2.5 mm Al eq. @ 86 kVp   |  |  |
| Tube voltage     | 60 - 70 kV  | 60 - 86 kV   |  |  |
| Anodic current   | 2-7.1 mA  | 2-12.5 mA  |  |  |
| Focal spot       | 0.5 mm  | 0.5 mm   |  |  |
|                  | SE  | SENSOR   |  |  |
| Туре             | CCD   | CMOS Flat panel  |  |  |
| Pixel size       | 48 μm   | 120 µm   |  |  |
| Voxel size       | n.a.  | 87.5 μm minimum  |  |  |
|                  | ACQUISITION   |  |  |  |
| PAN programs     | Panoramic (adult/child) - TMJ open/closed mouth in lateral projection - Maxillary sinuses P-A - Half panoramic (left/right) - Low Dose Panoramic - Frontal dentition - Ortho Rad Panoramic - Bitewing (left/right/double) |  |  |  |
| 3D programs      | n.a.  | Full dentition (85 x 93 mm)* - Single jaw (85 x 50 mm)* - Mandibular teeth (50 x 50 mm) - Maxillary teeth (50 x 50 mm) - TMJ (85 x 93 mm)* - Sinus (85 x 93 mm)* |  |  |
| Exposure time    | 14.4 s.   | 7 s. (full dentition)  |  |  |
| Grey levels      | 4096 - 12 bits  | 65536 - 16 bits  |  |  |
|                  | MECHAN  | IICAL DATAS  |  |  |
| Footprint        | 1107 x 953 mm   | 1107 x 953 mm  |  |  |
| Height           | Max 2190 mm   | Max 2190 mm  |  |  |
| Weight           | 62 kgs  | 67 kgs   |  |  |
|                  | IEC   |  |  |  |
| Class & Type     | Class I with type B applied parts according to IEC 60601-1 classification   |  |  |  |

<sup>\*</sup> Not available in Canada, where these volumes are limited to 80 x 80 mm or 80 x 50 mm.

X-MIND® prime is manufactured by Villa Sistemi Medicali and distributed by ACTEON.



|                          | TANONAMIC  | CBC1   | CELTIALOMETRIC                            |
|--------------------------|--|--|---|
|                          |  | X-RAY SOURCE   |   |
| Tube type                |  | Générateur DC haute fréquence                              |   |
| Total filtration         | 2.8 mmAl / 85 kV   | 7.0 mmAl / 90 kV   | 2.8 mmAl / 85 kV                          |
| Operation mode           | Continu  | Pulsé  | Continu                                   |
| Tube voltage             | 60 - 85 kVp  | 90 kVp   | 60 - 85 kVp                               |
| Anodic current           | 4 - 10 mA  | 4 - 10 mA  | 4 - 10 mA                                 |
| Focal point              | 0,5 mm   | 0.5 mm   | 0,5 mm                                    |
|                          |  | DETECTOR   |   |
| Туре                     | CMOS   | CMOS plat  | CMOS                                      |
| FOV and format           | 260 x 120 mm   | ø 40 x 40 mm, ø 60 x 60 mm, ø 80 x 80 mm,<br>ø 110 x 80 mm | 250 x 200 mm                              |
| Pixel size/Voxel size    | Pixel: 100 μm  | Voxel : 75 μm  | Pixel: 100 μm                             |
|                          |  | ACQUISITION  |   |
| Technique                | 180° single scan   | Numérisation unique 360 °                                  | Single scan                               |
| Exposure time            | 3.3 s - 13.5 sec   | 6 - 9 s  | 18 sec                                    |
| Scanning time            | 16,8 sec - 22,5 sec  | 12 - 30 sec  | 23 sec                                    |
| Programs                 | Standard, child, improved orthogonality panoramic, bitewings, maxillary sinus, TMJ | Semi-arc, arc, arc complet, sinus, oreille                 | Frontal PA, Frontal AP, option:<br>Carpus |
| Reconstruction time      | 3 sec  | from 15 sec  | 4 sec                                     |
|                          |  | IMAGE FORMAT   |   |
|                          | JPEG, BMP, PNG, TIFF, DCM  | DCM, STL   | JPEG, BMP, PNG, TIFF, DCM                 |
|                          |  | MECHANICAL DATA  |   |
| Max footprint dimensions | L 150 x W 110 cm   | L 150 x W 110 cm   | L 150 x W 172 cm                          |
| Height                   | Max : 235 cm   |  |   |
| Weight                   | 230 kg (PAN)   | 240 kg (PAN-CBCT)  | 280 kg (PAN-CEPH)                         |
|                          |  | IEC  |   |
| Class and Type           | Classe I, Type B   |  |   |
|                          |  |  |   |

|                    | WORKSTATION MINIMUM REQUIREMENTS                    |  |  |
|--------------------|---|--|--|
|                    | PAN/CEPH WINDOWS (WORKSTATION)                      | CLIENT WINDOWS   | CLIENT MAC OS  |
| Processor          | Intel i5  | Intel i5   | Quadcore 2.6 GHz   |
| Hard Disk          | 1TB 7200 rpm  | 300 GB   | 300 GB   |
| RAM                | 8 GB  | 4 GB or 8 GB (for big FOV DICOM stacks)                    | 4 GB or 8 GB (for big FOV DICOM stacks)                    |
| Graphics card      | OPEN GL 2.1 compatible (suggested an NVIDIA GT/GTX) | Nvidia Geforce or Nvidia Quadro<br>with 1 GB dedicated RAM | Nvidia Geforce or Nvidia Quadro<br>with 1 GB dedicated RAM |
| Screen resolution  | 1600 x 1024   | 1600 x 1024  | 1600 x 1024  |
| Network card       | INTEL CT 1000 pro                                   | 100 Mb for PAN/CEPH<br>1 Gb for CBCT                       | 100 Mb for PAN/CEPH<br>1 Gb for CBCT                       |
| Operating system   | Windows 7 Professional 64 bits                      | Windows 7 64 bits  | OS X Sierra (10.12)  |
|                    |   | DICOM 3.0 (OPTIONAL)                                       |  |
| Supported services | Worklist, Storage, Query/Retrieve, Print, Verify    |  |  |



39

38 : Available option