



RAYSCAN Studio

5 in 1

PANO / CEPH / CBCT

CT IMPRESSION / 3D FACE SCAN

RAYSCAN Studio

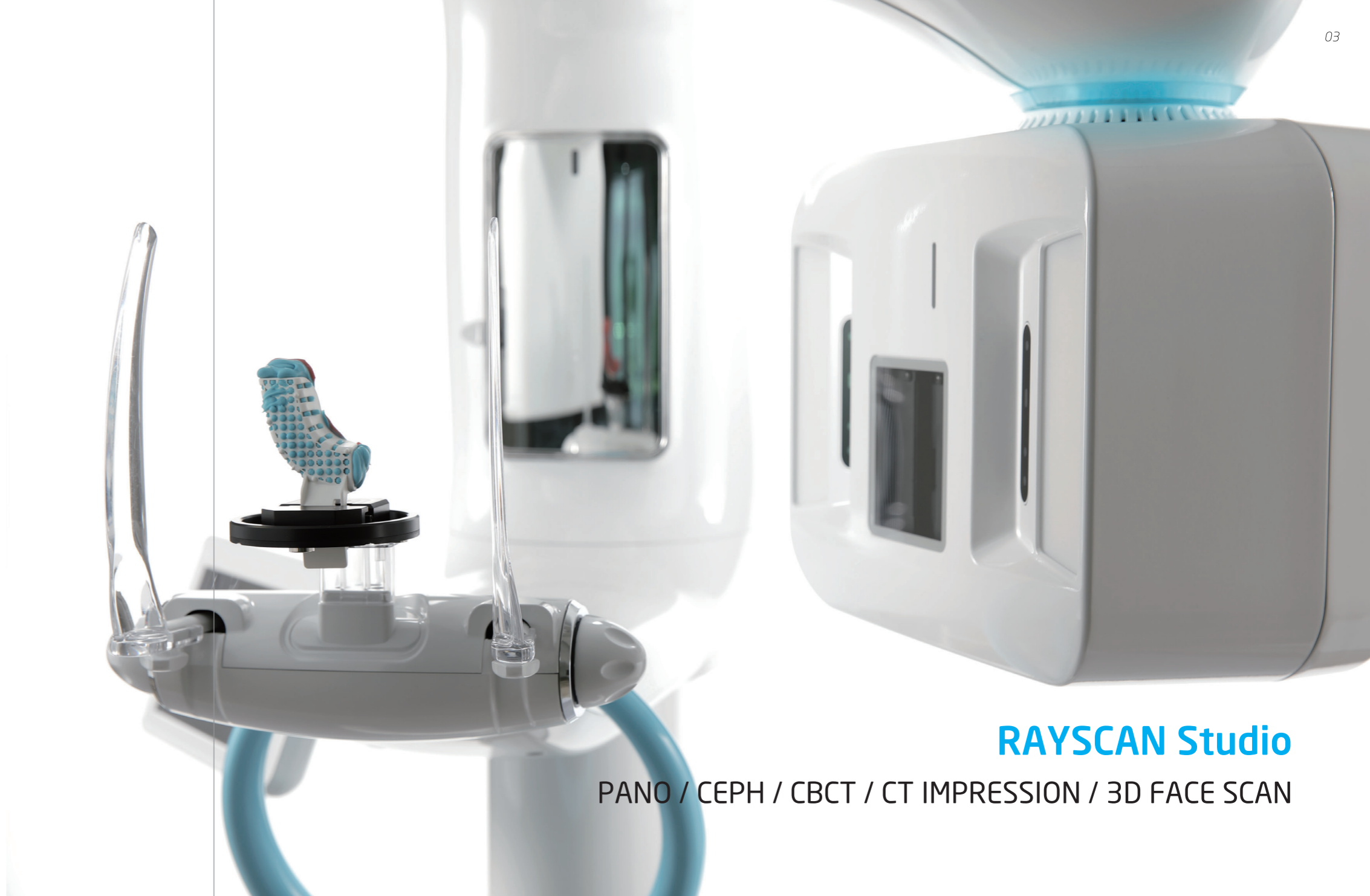
# THE CHALLENGES

## Up-to-date 5 in 1 CBCT

RAYSCAN Studio is the outcome of our challenges for the last decades. It is empowered to scan and manage all patient information for diagnostics and treatments in dental clinics for the upcoming digital dentistry.

The new CBCT will give you not only the fundamental insight into the patients' diagnosis by creating 3D Virtual Patient but also tools for predictable, safe and patient-friendly treatment planning.

Once you have your own 3D Virtual Patient, there is no limit in full digital analysis.

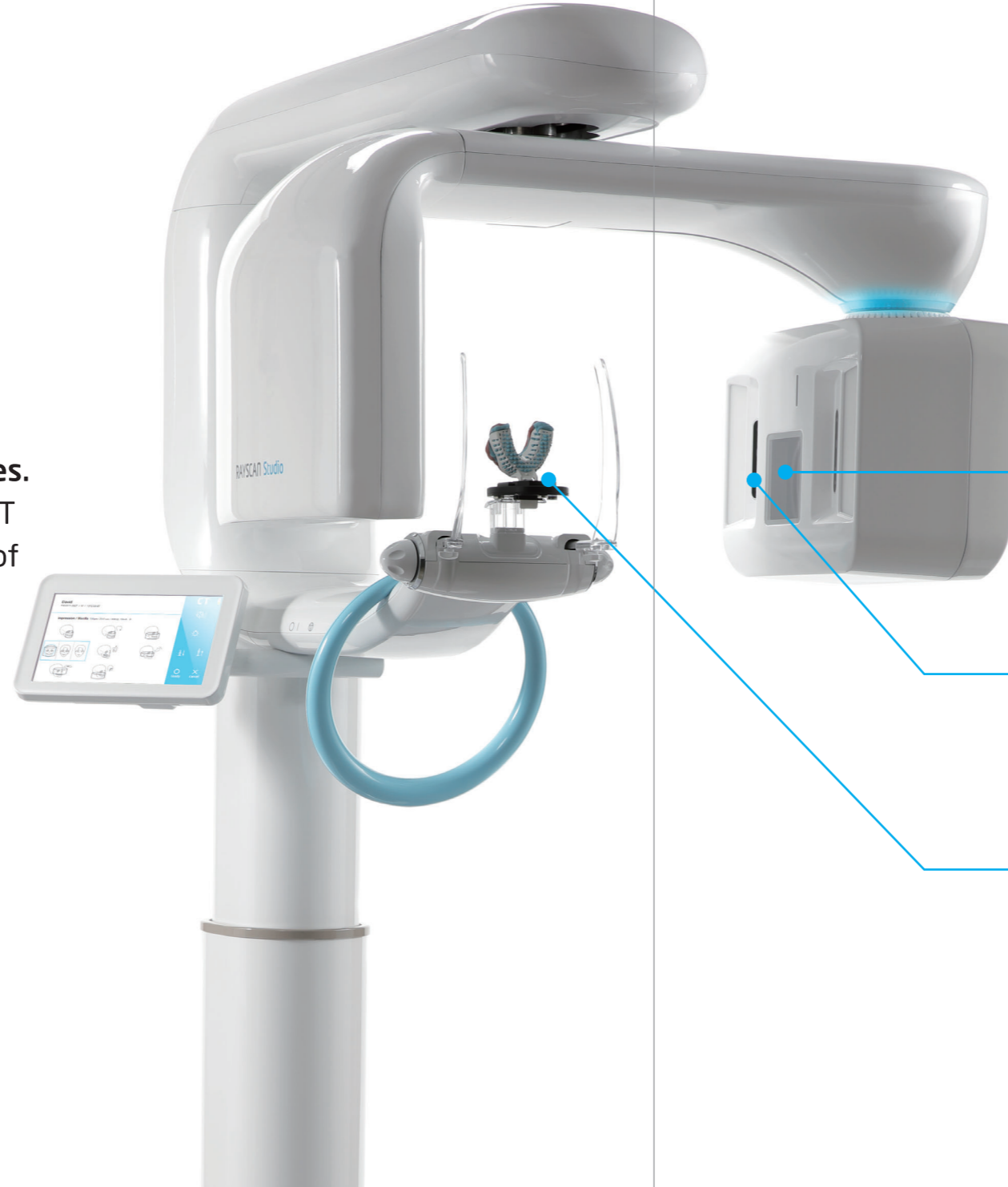


**RAYSCAN Studio**

PANO / CEPH / CBCT / CT IMPRESSION / 3D FACE SCAN

# THE FUTURE RAYSCAN Studio

We've been dreaming of a unique CBCT which integrates CBCT, 3D Face and CT impression (intraoral data) scan into one perfect piece for **better and predictable treatment planning and production of pre-planned dental appliances**. We have also prepared that the data scanned from the CBCT is transferred to 3D printing system for a rapid production of dental appliances in your place in order to deliver **the best quality patient care** at the most suitable price and time.



### CBCT

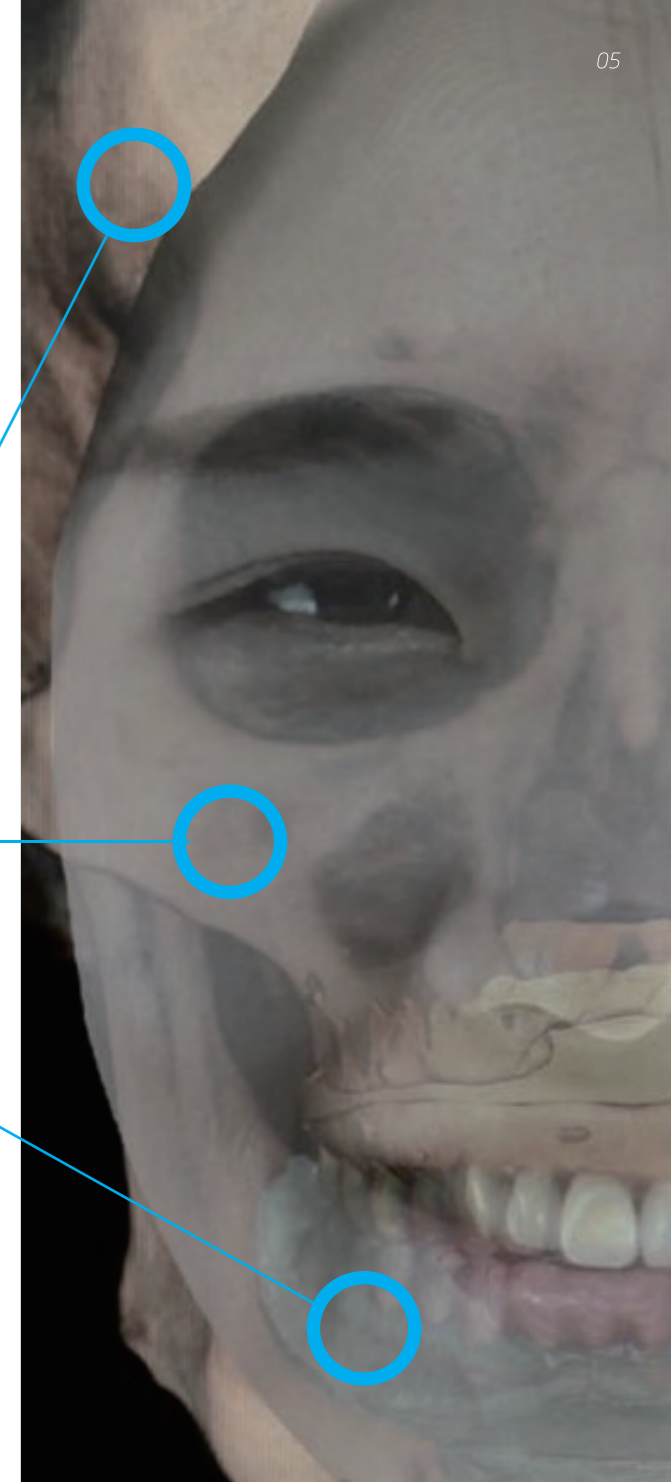
- Max. 20x20 FOV
- Light-guided FOV

### 3D Face scan

- Real 3D depth camera
- Independent 3D photo taking

### Object scan (CT Impression)

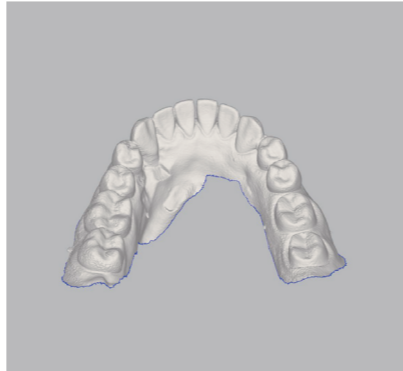
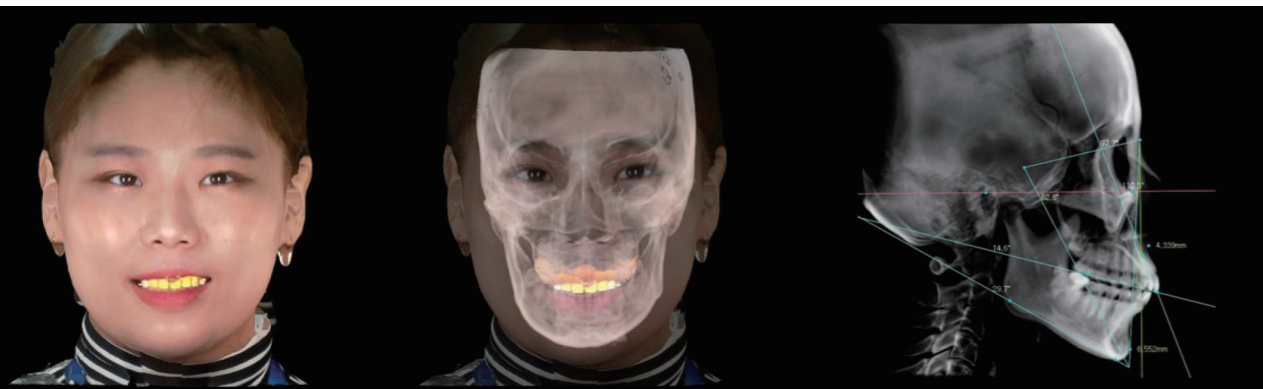
- Handy scan process
- Impression / Model scanning
- Auto STL conversion
- Open STL format



# THE VERSATILITY One for 3D & 2D

RAYSCAN Studio, the 5 in 1 system, is used for different purposes. Market-proven high quality images of 2D Panoramic/2D Cephalometric are provided. 3D CBCT can be used for the conventional CT diagnosis, 3D cephalometric analysis, etc. By superimposing all 3D scan data, you will open a new chapter in treatment planning of many different applications.

## Treatment planning on 3D Virtual Patient

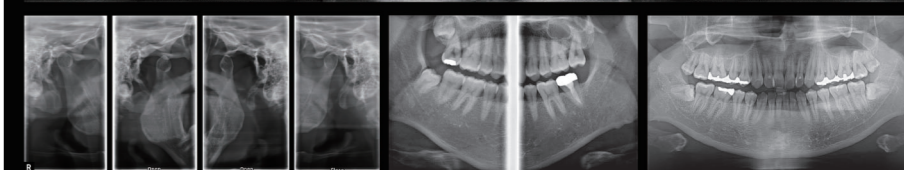


### 3D Object scan (CT Impression)

- Handy scan process
- Impression/Model scanning
- Auto STL conversion
- Open STL format

### 2D Panoramic

- High-definition image
- Standard, TMJ, Bitewing, Orthogonal, etc

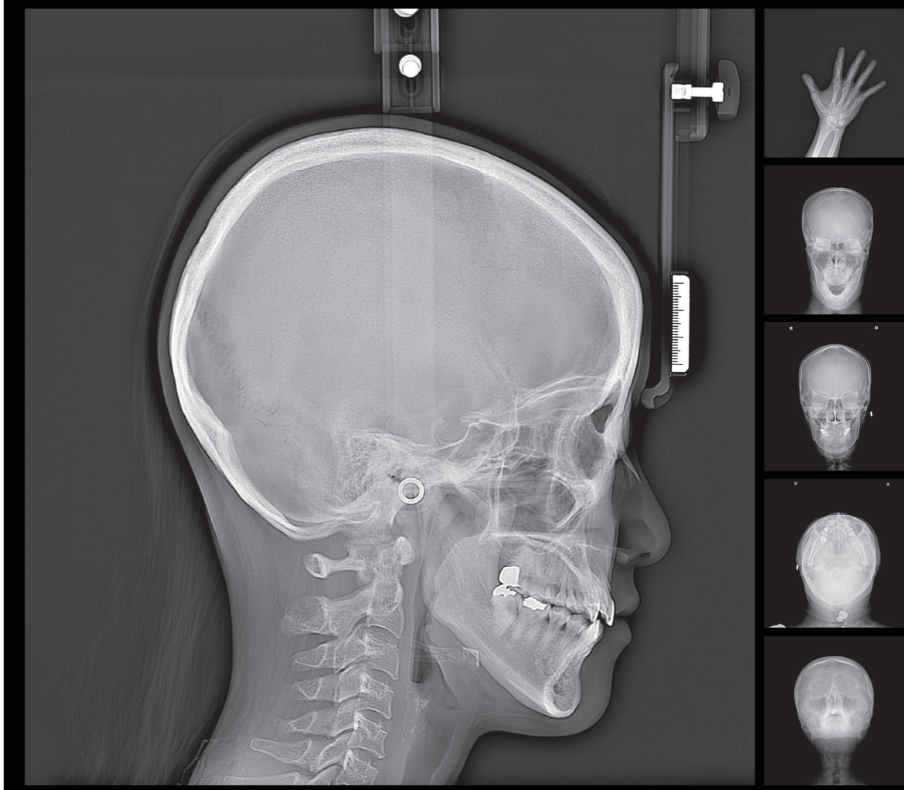


### 3D Face scan

- Real 3D depth camera
- Independent 3D photo taking

### 2D Cephalometric

- One-shot and scanning Ceph
- LAT, PA, Carpus, SMV, Waters, Reverse Towne, etc



### 3D CBCT

- Max. 20x20 FOV
- Light-guided FOV
- Jaw, Facial, Endo, TMJ, Sinus, Airway

## 3D VIRTUAL PATIENT Team-up of all 3D scan data

RAYSCAN Studio is designed to scan and put together all patient information (Impression, CBCT and 3D Face scan) in one system. There is no need to have an intraoral scanner, a face scanner or a CT separately. You can avoid trouble when you put together 3D data scanned from different systems. Superimposition of all 3D scan data and creation of 3D Virtual Patient become easier and more precise than ever when you have this 5 in 1 CBCT.

Impression scan



CBCT scan



3D Face scan

**3D Virtual Patient**

## THE GOAL

# Perform Predictable Treatment Planning

Once you have your own 3D Virtual Patient, there is no limit in full digital analysis. There is also unlimited number of applications that you can start in your clinic. It is your grounds to perform predictable, safe and patient-caring treatment planning.

Planning of a treatment on 3D Virtual Patient simultaneously leads to design of dental appliances such as teeth, dental model, surgical guide, etc.



# CLINICAL APPLICATION

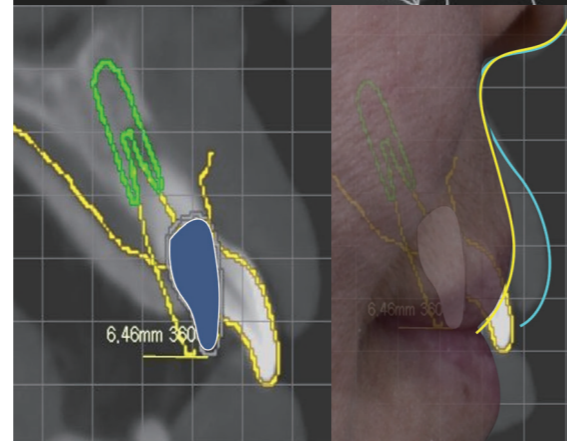
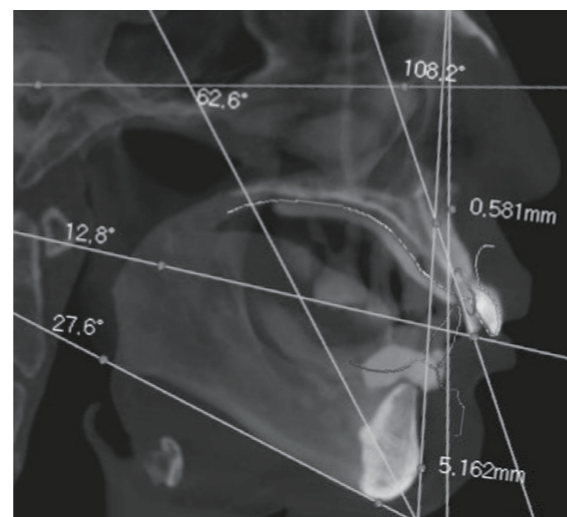
## Initial analysis

Create virtual patient using CBCT, facial scan & model



## Facial analysis

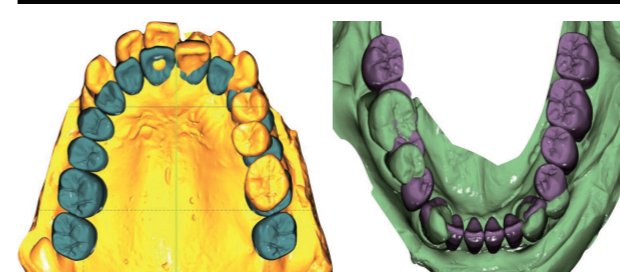
Analyze facial pattern & identify current problems with CT based cephalometric



# Digital Oral Design

## Digital mounting & EZ wax-up

Decide index teeth for digital wax-up & mounting



## Oral design simulation



## Treatment result



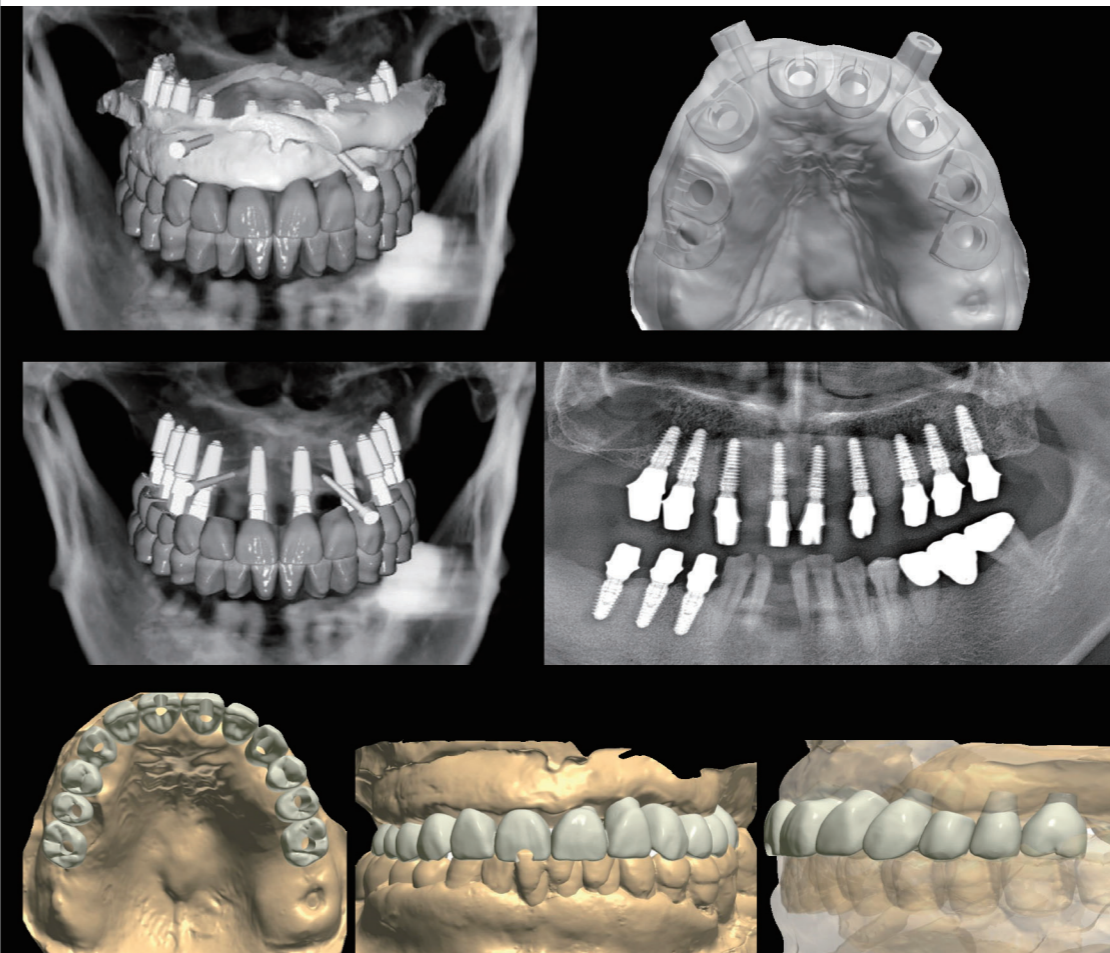
# CLINICAL APPLICATION

Implant design allows accurate planning and analysis for faster, easier and smarter implant surgery.



# Digital Implant Design

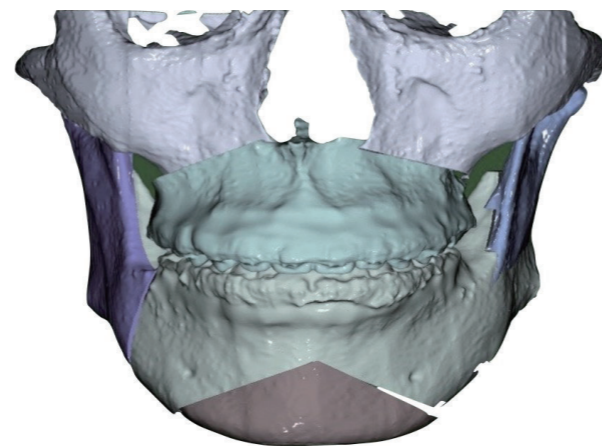
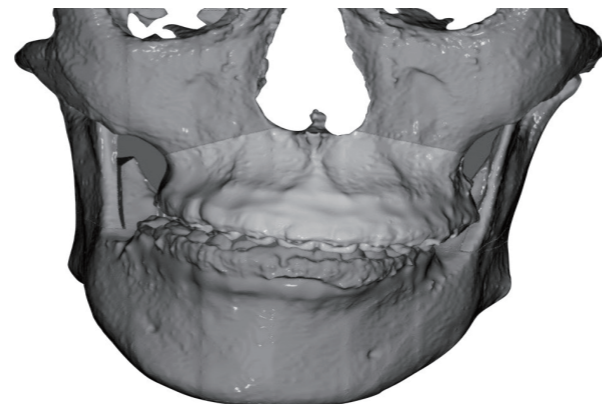
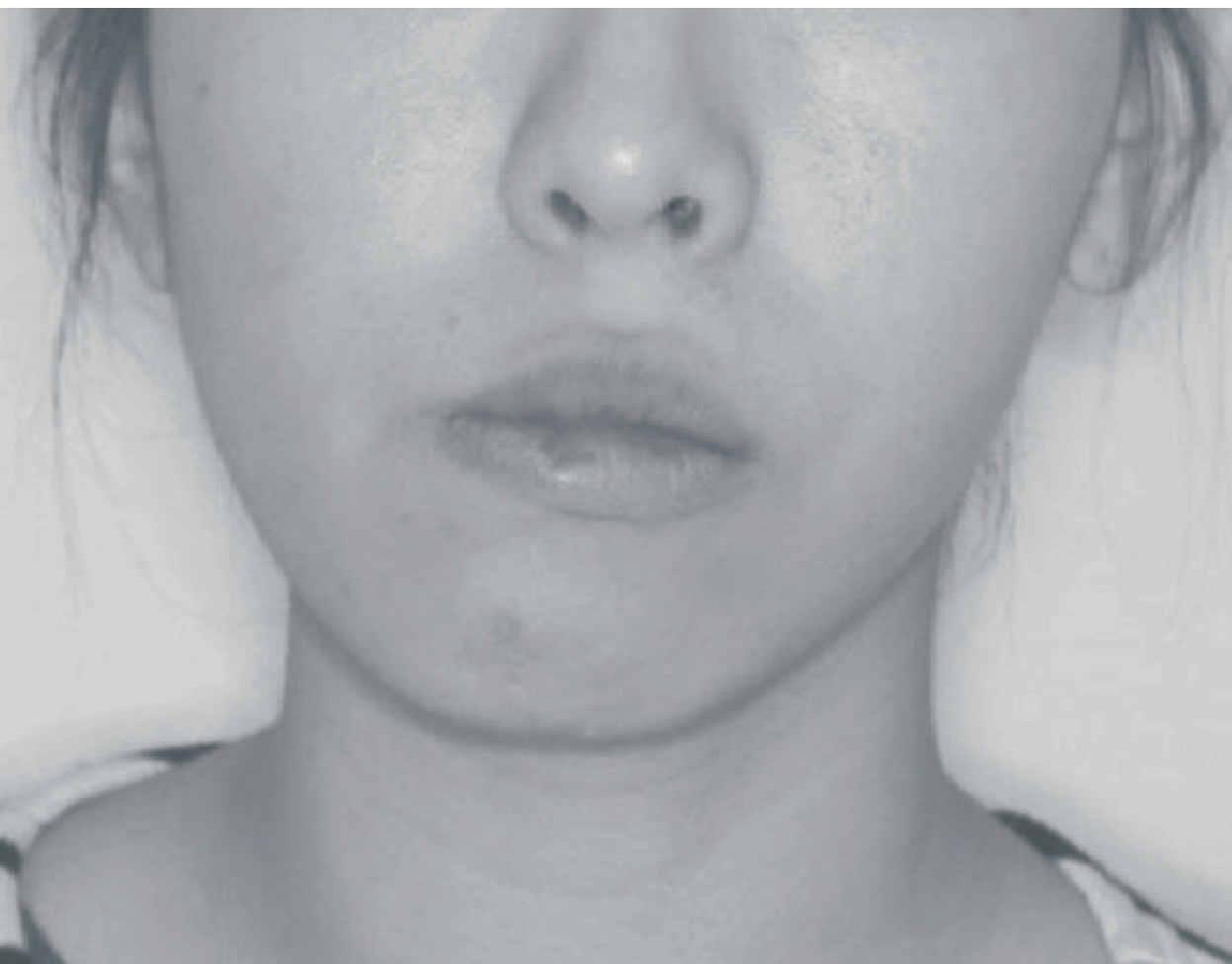
Design of surgical guide, abutment and teeth makes it possible.





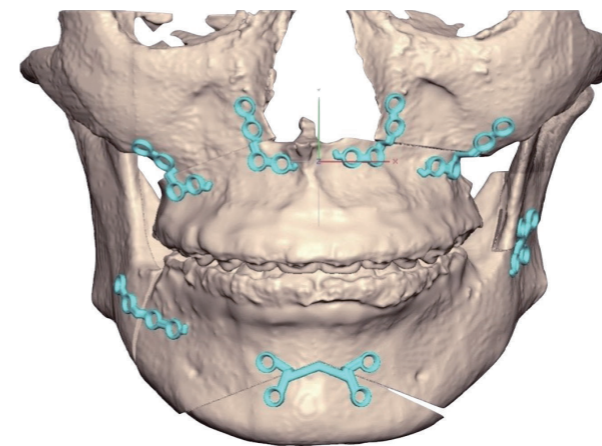
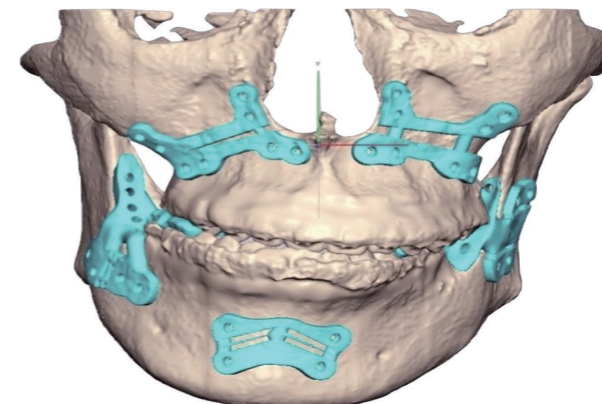
# CLINICAL APPLICATION

FACE GUIDE™ provides accurate bone and tissue analysis, allowing precision planning for safe, predictable, and high-quality orthognathic surgery.



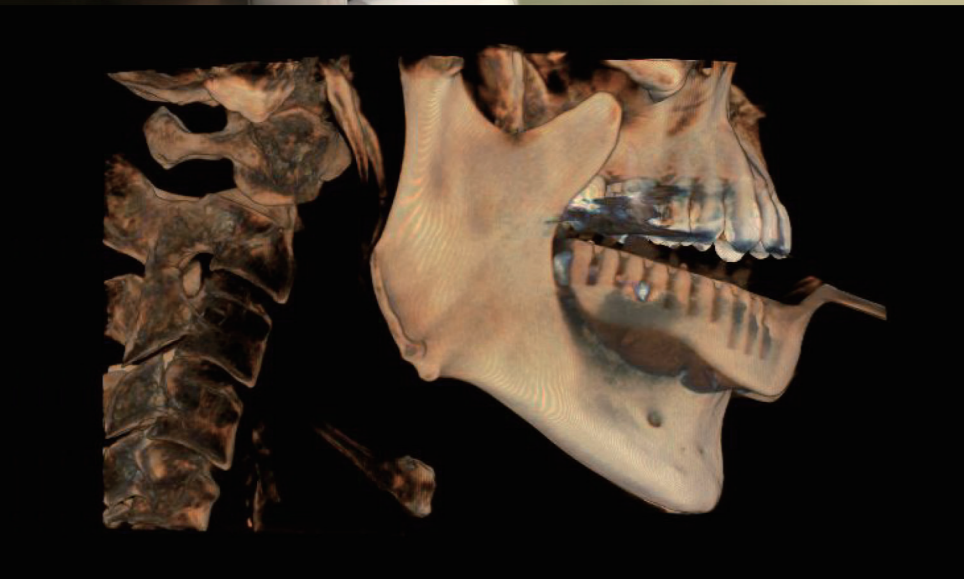
# Digital Orthognathic Design

Once the surgical plan is confirmed, a SAW-GUIDE and FACE-PLATE are provided to facilitate precise orthognathic surgery within a shorter time. These will minimize risks and post-operative complications.

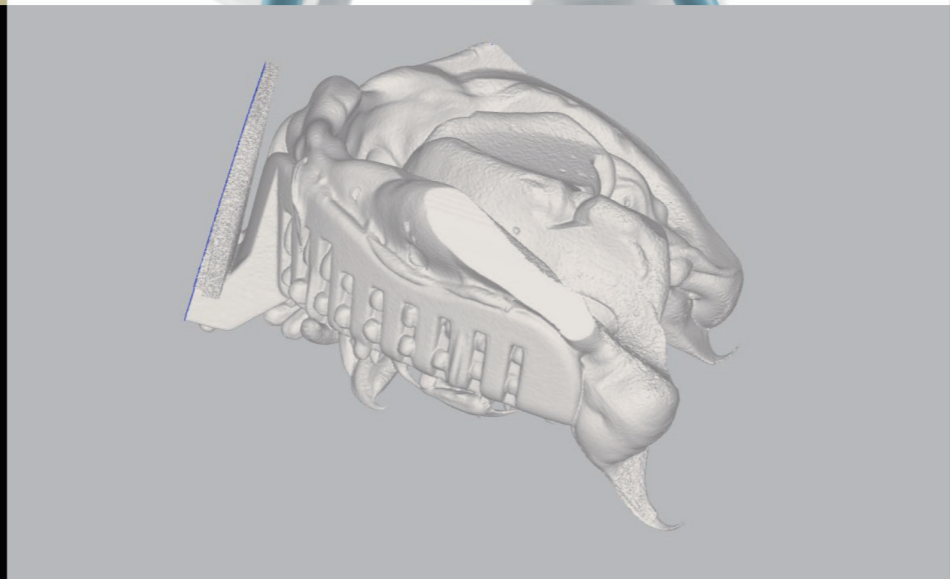


# DIGITAL TRAY™

## Digital treatment planning



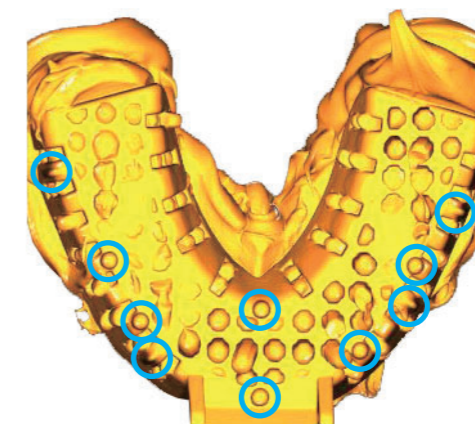
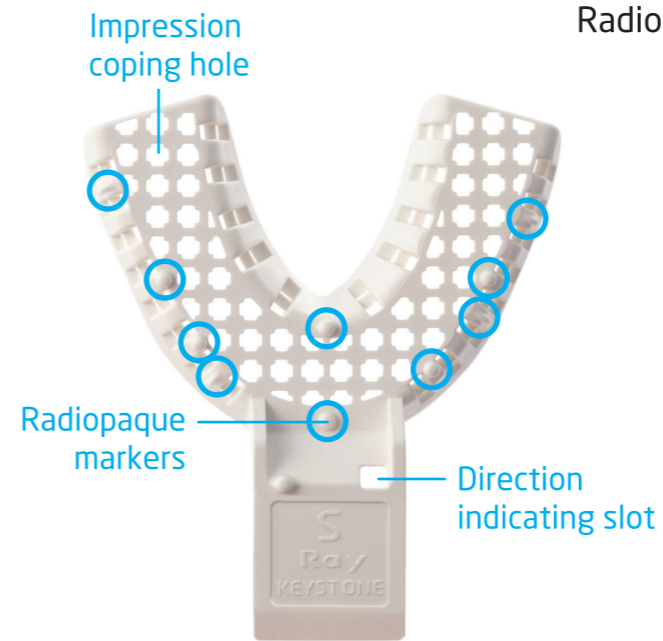
## CT Impression scan



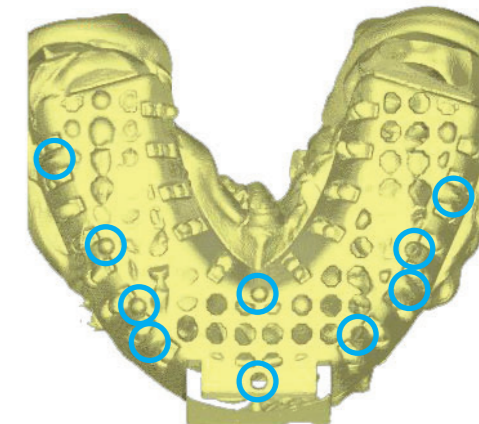
The unique tray is specially designed for accurate digitalization of patient dentition information.

Its radiopaque material and structure are easily distinguishable in X-ray CT. It also not only captures negative imprint of hard teeth/soft tissues but also provides positioning information in the patient mouth.

Radiopaque markers shown on the tray, impression STL data and CT data



Impression STL data



CT data

# Specifications

\* Availability varies by country and its regulation.  
Item may be optional or not available.  
Contact your sales representative for details.

## RAYSCAN Studio (RCT800)

Type	Cone Beam CT, Panoramic, Cephalometric, Object scan (CT Impression)*, 3D Face scan*
Patient positioning	Standing (Wheelchair accessible)
Focal spot	0.5
Tube current	4~17mA
Tube voltage	60~90kVp

CBCT		Panoramic		Cephalometric	
FOV size	Max. 20x20cm	Image size	Max. 12cm (H)	Option type	None, SC, OCS, OCL
Free FOV support	Yes	Free FOV support	Yes	Free FOV support	Yes
Scan time	4.9~16sec	Scan time	Max. 14sec		
Voxel size	70~300µm				
Fast scan mode	Yes				
Object scan support*	Yes (CT Impression and model scan)				
3D Face scan support*	Yes				

## Cephalometric (Option)

Type	SC (Scanning Ceph)	OCS (One-shot Ceph Standard)	OCL (One-shot Ceph Large)
Image size	Max. 26x22.5cm	Max. 30x25cm	Max. 33x33cm
Scan time	3.7~19.8sec	0.6 / 1.6sec	0.2 / 0.5sec



### Ray Europe GmbH

Otto-Volger-Strasse 15, 65843 Sulzbach am Taunus

Tel. +49 6196 7656 102

Email [info@rayeurope.com](mailto:info@rayeurope.com)

Web [www.rayeurope.com](http://www.rayeurope.com)

### Ray Co., Ltd.

332-7, Samsung1-ro, Hwaseong-si, Gyeonggi-do, 18380, Korea

Tel. +82.31.605.1000

Email [ray\\_sales@raymedical.co.kr](mailto:ray_sales@raymedical.co.kr)

Web [www.raymedical.com](http://www.raymedical.com)

### DONGBANG ACUPRIME

1 Forrest Units, Hennock Road East, Marsh Barton, Exeter EX2 8RU, U.K

Tel. +44.1392.829500

Fax +44.1392.823232