



Technology for Convenience make it easy, with Ray







### ower dose The RAYSCAN $\alpha$ is designed with cutting edge detectors and pulsed X-ray technology. Various 2D panoramic modes provide the relevant clinical data you need to make accurate diagnoses. Proprietary CBCT reconstruction, Adaptive Moving Focus, and noise reduction technologies provide high quality images at optimized radiation exposure. Fast Scan Times 4 second cephalometric scans reduce dose by over 80%\* Cutting edge cephalometric imaging technology results in fast scan times for orthodontic procedures. The high performance Cadmium Telluride (CdTe) detector allows for the capture of excellent cephalometric images at a reduced radiation dose. Short exposure times reduce the risk of retakes associated with patient movement. Compared to former products

Pulsed X-ray

Radiation dose is reduced through cycling off the generator during data transfer from the sensor. Operation of pulsed X-ray needs high frequency of generator. RAYSCAN  $\alpha$  is designed to implement over 100 kHz for the operation of pulsed X-ray.

### Intuitive interface

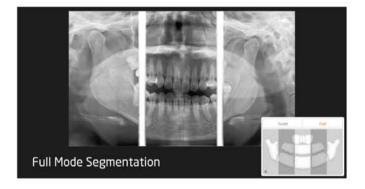
#### Simplified user interface provides an intuitive imaging workflow.

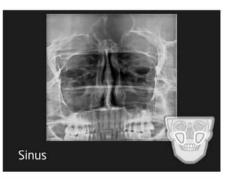
Optimize scan protocols and radiation exposure based upon patient's age and shape of their dental arch
 Easily select between panoramic, cephalomteric and CBCT modalities

- Choose between pre-set scan modes for panoramic segmentation

















# Excellent image quality through advanced technology

### AMF (Adaptive Moving Focus)

RAYSCAN a utilizes Adaptive Moving Focus Technology to configure the panoramic image layer and optimize the signal to noise ratio to produce high quality images.





### Denoising

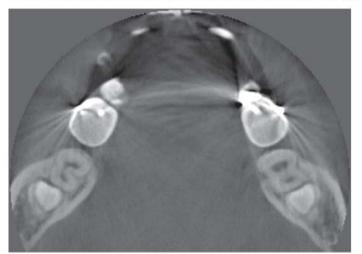
Proprietary noise reduction technology enhances image quality.



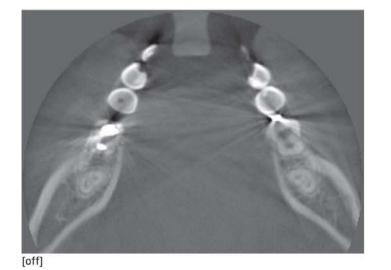


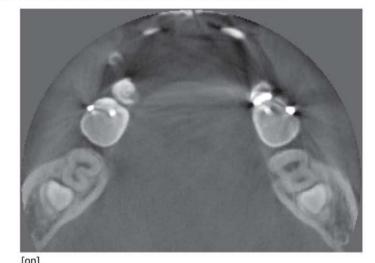
### MAR (Metal Artifact Reduction)

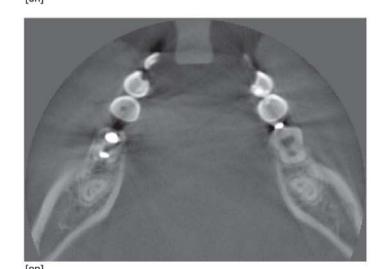
Our own CBCT reconstruction technology significantly reduces metal artifacts such as stars and shadows caused by X-ray scatter with no additional procedure and time. With the same time, RAYSCAN  $\alpha$  provides more information around metal for accurate diagnosis.

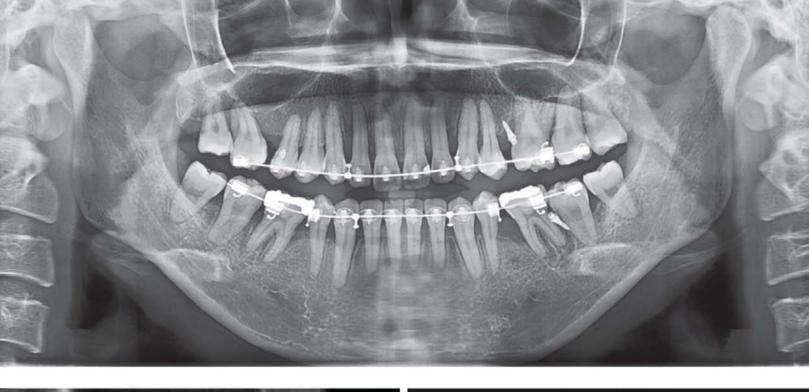
















### SMARTDent 2D Imaging Software

#### **Key Features**

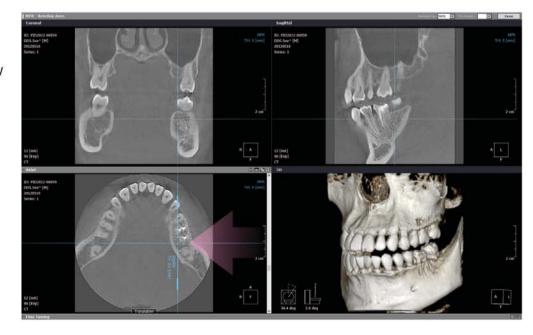
- Integrated dental image management
- Touch environment considered simple UI
- 16 bits full imaging system with DICOM 3.0
- Supports TWAIN-compliant input devices



### Xelis 3D Imaging Software

### **Key Features**

- Panoramic image & Cross-Sectional image
- Excellent 3D image with shading technology
- Nerve canal drawing & implant simulation
- DICOM print & CD/DVD burning



## RAYSCAN web - Optional

#### **Key Features**

- Convenient use in tablet & smart phone
- Optimal viewing experience by responsive web design
- No need to install software



Please note that as a generic viewing application RAYSCAN web is not suited for diagnostic purposes. However it is an excellent tool for communication a diagnosis made at SMARTDent for desktop.

### ATCT (Adaptive Tube Cooling Time)

- Continuous acquisition without forced cooling prevents image downgrading

### Auto Alignment

- Automatic positioning for desired modality

### Minimized preparation time

- Provides psychological stability of the patient, reducing moving artifact of images

### Wireless Remote Control

- Simple patient positioning



# be comfortable, with Ray

All patient position can be controlled by Wireless Remote Control



**Technical Specifications** 

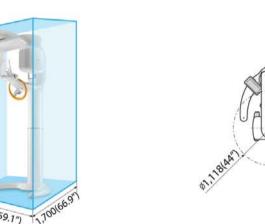
#### RAYSCAN a

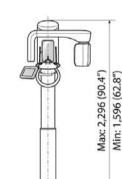
		Will Schill a	
Туре	Panoramic, Cephalometric, Cone Beam CT		
Patient positioning	Standing or sitting (wheelchair accessible)		
Focal spot	0.5mm		
Tube voltage	60~90kVp		
Tube current	4~17mA		
Weight	RAYSCAN α-Expert (Pano), RAYSCAN α-Expert3D (Pano+CT):148kg (326.28lb)		
	RAYSCAN $\alpha$ -Expert (Pano+Scan ceph), RAYSCAN $\alpha$ -Expert3D (Pano+CT+Scan ceph):164kg (361.56lb)		
	CBCT	Panoramic	Cephalometric (Scan type)
Detector type	CMOS FPD	CMOS detector	CdTe detector
F.O.V	9x9cm		20x24cm, 22x24cm, 26x24cm
Voxel size (CT)	0.143~0.286mm³	d¥3	-
Scan time	14sec	Max. 14sec	Min. 4.0sec

Top View

### Dimensions (Unit: mm/inch)

Suggested Operating Space

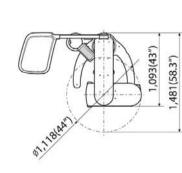


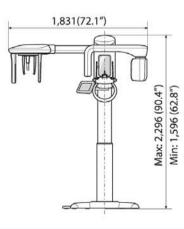


Front View

RAYSCAN a-Expert (Pano) / RAYSCAN a-Expert3D (Pano + CT)







FDA registration







332-7, Samsung 1-ro, Hwaseong-si, Gyeonggi-do, 445-330, Korea

Phone +82.31.605.1000

Email ray\_overseas@raymedical.co.kr

www.raymedical.com

#### Imported by RAYSCAN America

8920 Wilshire Blvd., Suite 603, Beverly Hills, CA 90212
Phone (800)940-9416 / Fax (310)861-1911
Email info@rayscanamerica.com
www.rayscanamerica.com

