

# GENORAY MAKES THE INVISIBLE VISIBLE !



Genoray EU GmbH

Headquarter:  
GENORAY Co.,Ltd.

Genoray Japan

Genoray America Inc.

#### GENORAY Co.,Ltd.

512, 560, Dunchon-daero, Jungwon-gu, Seongnam-si,  
Gyeonggi-do, 13230, Korea  
Tel. +82-31-627-3900 Fax. +82-31-737-8016  
genoray@genoray.com

#### Genoray America Inc.

147 E. Bristol Lane Orange, CA 92865 USA  
Tel. +1-855-436-6729 Fax. +1-714-786-8919  
inquiry@genorayamerica.com  
www.genorayamerica.com

#### Genoray EU GmbH

Westhafenstr. 1 13353 Berlin, Germany  
Tel. +49-30-509-694-98 Fax. +49-30-530-198-08  
smhan@genoray.com

#### Genoray Japan

2F Ishibashi-Bldg, 1-4-15 Shinyokohama,  
Kohoku-ku, Yokohama-city, kanagawa, 222-0033 Japan  
Tel. + 81-45-620-4971 Fax. +81-45-620-4972  
Info@genorayjapan.co.jp www.genorayjapan.co.jp

## GENORAY RELIABLE SERVICE

Service and support is always our number one priority. If you require any service after the purchase of a Genoray unit, GENORAY is always there to support you. Our service staff is waiting to support you so please feel free to give us a call. We have built up a reputation for superior quality and service in Korea which we hope to extend to you.



SURGICAL MOBILE  
C-ARM X-RAY SYSTEM

OSCAR <sup>classic</sup>  
ZEN-7000  
ZEN-5000

Powerful, Light, Versatile, Performance C-Arm !  
in DIGITAL IMAGING



# GENORAY MAKES THE INVISIBLE VISIBLE

With the incessant challenge, and the enthusiastic passion, we, Genoray is the company committed to making contribution to the happiness and the healthy life of human being through the X-Ray technology, a valuable light which saves lives.

- Developed OSCAR Classic
- 1M CCD camera is equipped on all C-Arms  
Acquired CE certificate for ZEN-2090Pro  
ZEN-2090Pro FDA 510(K091918)  
Developed ZEN-7000
- Developed C-Arm with 1M pixel camera  
Developed economical C-Arm (ZEN-2060)
- Developed High Performance C-Arm (ZEN-3090)  
Acquired CE certificate for ZEN-3090
- Selected as Superior Technology Company  
Selected as INOBIZ Company, Awarded export prize  
Approved KGMP Quality Management Standard Conformity  
Awarded with "10 Million Dollars Trophy" from Korea International  
Awarded Design&Tech innovation grand prize

Powered by and enthusiastic passion for X-Ray technology, Genoray stands up to the incessant challenges of constant leading a healthy life by committing to the improvement of our products.

Don't miss your chance to use  
A new and incredible 12 Inches image intensifier  
powered by 15kW output generator  
and active air cooling system

	OSCAR classic	ZEN-7000	ZEN-5000
Generator	5.3 kW	15 kW	3.2 kW
Image Intensifier	9"	12" / 9"	12" / 9"



# GENORAY MOBILE C-ARM

GENORAY Mobile C-Arms are culmination of decades worth of developmental experience from Genoray. Your diagnosis need will be met while improving your productivity.

## WIDER VIEW

See the widened view with your own eyes.

## GREAT IMPROVEMENTS IN IMAGING

You can definitely see the Great improvement in imaging.

## FOOT SWITCH [DOUBLE / TRIPLE]

Hands free! users can concentrate on surgery by using footswitch. Also users can freely operate the C-arm by oneself.

## USER FRIENDLY OPERATION FROM THE TOUCH SCREEN LCD PANEL

Recognizable icons and simplified graphics make operation easy.



## HIGH OUTPUT

A useful tool for viewing in cardiovascular procedures.

## 1K x 1K HIGH RESOLUTION CCD CAMERA

The million pixel high definition camera supports clear images without distortion to provide the best diagnostic imaging environment possible.

ABC (Auto Brightness Control) high and low levels, brightness contrast ratio of 30:1 Image rotation, +/- image, zoom in/out, up down left right image rotation.

## SNAP SHOT MODE













Get the perfect digital radiography image you need ! Obtain a crisp, clear image with our "snap shot" mode which allows you to get the perfect digital radiography image you need.



# OSCAR classic

Convenient touch screen and simple foot switch make easy image acquisition.  
Rewind missed image by software to prevent retake of image.



-  9" Image Intensifier
-  5.3kW
-  Active Air Cooling HFG
-  ±155° Dynamic Orbital Rotation
-  Free Space 800mm SID 1,000mm
-  10.4" Touch Screen
-  34" Wide Monitor
-  Dual Foot Switch (Shot / Save, Lift Up / Lift down)
-  Smart Review
-  Lowering Dosage
-  Structured Dose Report
-  -DICOM 3.0  
-CD/DVD Burner  
- USB Port



## ACTIVE AIR COOLING HIGH FREQUENCY GENERATOR

Our 5.3kW generator is one of the most powerful generator in the world. Active aircooling system prevents overheating and offers a long duration of operation with stable results.

- High Performance Active Air Cooling
- Protect valuable parts (tube, HFG, etc.) from overheating and damage ; Guaranteed lifetime, safe medical treatment
- Smart collimator
- Various Pulsed X-Ray
- Extended usage for longer interventional procedures

# ZEN-7000 / ZEN-5000

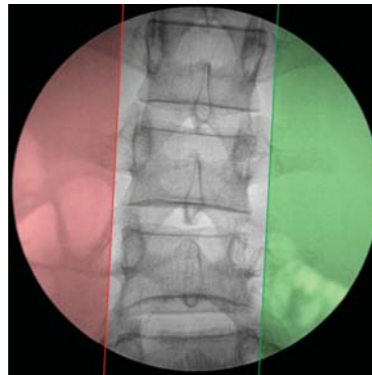
## NEW LEVEL OF CLARITY AND POWER

### ROTATING / STATIONARY TUBE

Rotating (ZEN-7000), The rotating tube allows for a higher X-ray output while also making it possible to use for longer periods of time due to the overheat shut off technology. Stationary (ZEN-5000), The stationary tube gives high performance with the affordable price.



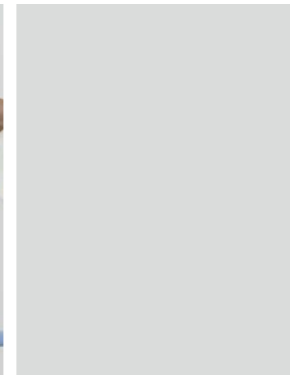
Laser aimer (option)



Virtual collimator



User friendly operation from the touch screen LCD panel



## LOW DOSAGE FEATURES

### HD VIDEO FUCTION

The high definition videos are captured at 30 frame/second to allow for continued loops. get the high quality of image with low dose X-rays. Maintains a high definition image without the noise and blur effect during the movement.

### ANATOMIC PRESET MODE

Minimizes radiation dosage by selecting from pre-set exposure values (kV & mA), which are specific to the body part in focus.

### DNR [Dynamic Noise Reduction] FUNCTION

Produces clear images by reducing the noise in the image with minimal radiation doses. It can be controlled by selecting modes from high to low to balance the noise and eliminate blurring while operating in motion.

### VIRTUAL COLLIMATOR

Even without exposing X-rays, the radiation area can be determined by virtually collimating the desired area on the touch screen LCD panel. The radiation exposure is minimized by the optimization setting for the radiation fluctuation.

### LOW DOSE MODE

Kind dosage! Low dose mode is to acquire the reasonable image to diagnose the patient with minimum dosage.

### MOTION DETECTION

This function detects the movement and reduce the after image while exposing X-ray.

## ANGIOGRAPHY PACKAGE

### DSA [Digital Subtraction Angiography]

Improves diagnosis by utilizing a repeating stored video feature along with detailed time measurement functions in the software.

### ROAD MAPPING, LAND MARK, PEAK OPENCIFICATION AND MOTION DETECTION

After setting a position for a vessel, the subject can be moved back to their original place by using the shift function to compensate for any movement.

Provides various functions that helps accurately to insert a guide wire, catheter is compatible with the hybrid operating room.



# POWERFUL SOFTWARE ZENIS

A total solution from acquisition, storage, management, communication to print out  
 Provide convenient environment from user-centric interface /  
 Diagnosis and confirm from recognizable simple icons /  
 Convenience of database management



- Convenient diagnostic functions for easy patient / image management
- Accurate diagnostic tools
- Improve the efficiency of your hospital management

- Perfect compatibility with all PACS
- A must have for a digitally equipped hospital
- Convenient communication and management for your customers

## IMAGE MANAGEMENT

Invert, rotation, zoom In/out, magnify glass and etc

## MEASUREMENT & ANNOTATION

Measurement of length, angle, and Input and storage of line, arrow, characters

## DICOM 3.0

Storage service, worklist service

## RECOMMENDED SYSTEM REQUIREMENTS FOR ZENIS

## DATABASE MANAGEMENT IN HIPAA APPROVED FORMAT

## DICOM SUPPORT



## DSA [DIGITAL SUBTRACTION ANGIOGRAPHY]

Angiography option utilizes repeating stored videos while subtracting unwanted artifacts

## NATIVE DSA

Pairing fluoroscopy with contrast media to display the basic angiography views

## MOTION MATCHING

Selects the proper mask to apply and remove artifacts made by a patient's movement or breathing

## POST-PROCESSING

processing: Improvement of the processed image after the DSA procedure

## LANDMARKING / BRIGHTNESS / CONTRAST

After setting the position for a vessel, the subject can be placed back to their original position by using the shift function to compensate for any movement. Allows for various functions that assist with accurately inserting a catheter.

## ROAD MAPPING, LAND MARK, PEAK OPENCIFICATION AND MOTION DETECTION

After setting a position for a vessel, the subject can be moved back to their original place by using the shift function to compensate for any movement. Provides various functions that helps accurately to insert a guide wire, catheter. is compatible with the hybrid operating room.

## AUTO ROADMAP MASK

Obtain blood vessel type information while only using a small amount of contrast media

## MANUAL ROADMAP MASK

Roadmap your vessels using a previously taken DSA image

## ROADMAP PIXEL SHIFT

Re-position the roadmap mask by shifting the pixels to the proper position

## PEAK OPACIFICATION

Ability to diagnose a blood vessel with only a small amount of contrast media

