

GE Medical Systems

# OEC® 9800 Plus

Digital Mobile Imaging System



imagination at work



# OEC® 9800 Plus

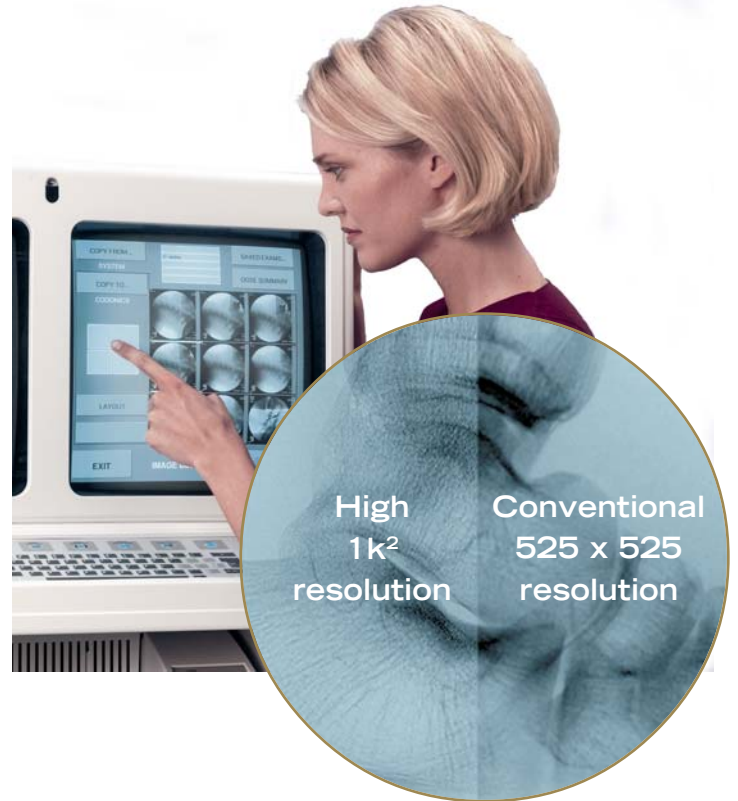
Digital Mobile Imaging System

## Uncompromised Surgical Imaging

### The OEC 9800 Plus for 1k<sup>2</sup> High Resolution Imaging

The OEC 9800 Plus is the gold standard in mobile fluoroscopy applications and innovative X-ray imaging technology. Built on the leadership and experience of thousands of systems installed world-wide, GE has set the standard in mobile C-arm imaging with the OEC 9800 Plus.

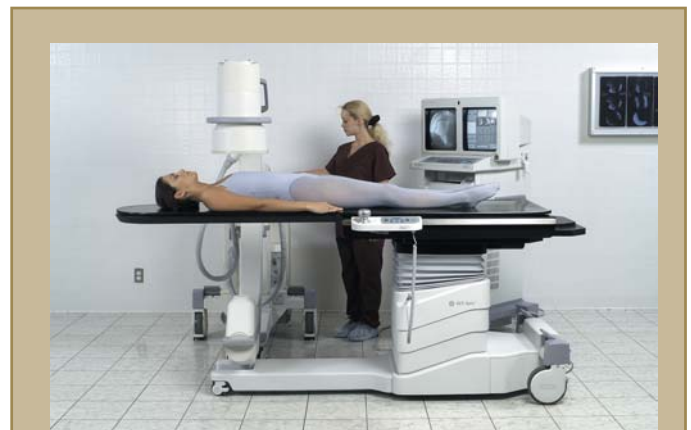
- True 1k<sup>2</sup> high resolution imaging technology on a mobile system.
- Featuring our proprietary Image I.Q. for uncompromised image quality.
- Enhanced mechanical design, ideal for a wide range of applications.
- Simple user interface reduces procedure time to improve efficiency.
- Superb image quality improves surgical outcomes.
- Highest image quality at the lowest possible dose.



### The First Mobile C-arm with True 1k<sup>2</sup> High Resolution Imaging & Advanced Features

This advanced mobile imaging system has broken a barrier traditionally reserved for contemporary fixed-room imaging systems—true 1k<sup>2</sup> high resolution imaging resolution throughout the imaging chain produces four times the resolution of previous mobile systems.

- Advanced acquisition at 30 PPS and playback at 30 FPS at 60 Hz for dynamic imaging needs (25 PPS at 25 FPS at 50 Hz).
- Specially designed rotating anode reduces overheating during long procedures.
- High power for dense anatomy penetration and challenging imaging applications.



### OEC Mobile C-arm Systems and Services Rank the “Best in the Industry”

GE was the only company to receive “A” scores for user satisfaction in every category of a recent report from MD Buyline, June 2003.\*

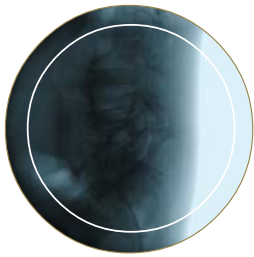
*\*MD Buyline is a leading independent healthcare research company.*

# Featuring Our Proprietary Imaging Technology with Point and Shoot Ease-of-Use

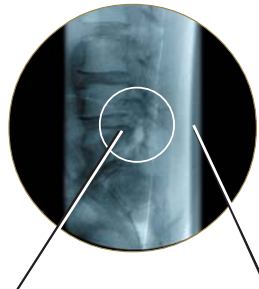
## Image I.Q.

GE's proprietary Image Intelligence technology provides extraordinary image quality. This exciting imaging innovation features Smart Window and Smart Metal, illustrating GE's continued commitment to technology leadership.

### Conventional Image



### Image with Smart Window



Sampling Window

Collimator Position

### Smart Window

Smart Window technology dynamically senses the collimator position and automatically adjusts the sampling window size to optimize image quality.

- Adjusts brightness.
- Levels contrasts.
- Dual-leaf tungsten collimator.

### Smart Metal

Smart Metal is a unique innovation that further enhances image quality. After Smart Metal is initialized, optimized image resolution is maintained even with the introduction of metal objects into the X-ray field.

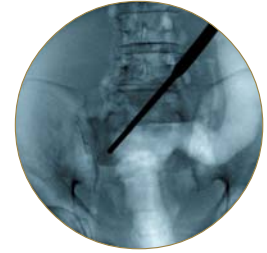
- No manual brightness and contrast adjustments are needed.
- Reduces system sensitivity to metal.

### Conventional Image



Metal is introduced

### Image with Smart Metal

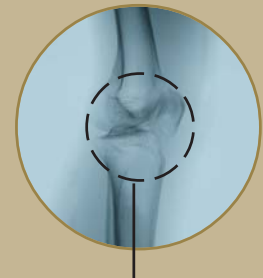


Smart Metal enabled

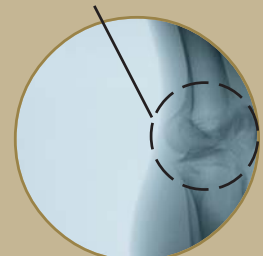
### AutoTrak

During live fluoro, AutoTrak automatically seeks the subject anatomy within the imaging field and automatically selects an optimum imaging technique. In most imaging situations, if the subject anatomy moves within the field of view, AutoTrak will maintain the correct exposure, even if the anatomy moves toward the edge of the imaging field or is improperly collimated.

- Detect subject anatomy with dynamic sampling window.
- Reduction of dark images and burn-out.
- Image stabilization means fewer images and lower dose to physician and patient.
- True point-and-shoot technology in most imaging situations.



*Invisible AutoTrak sampling window automatically moves with the anatomy, ensuring excellent images regardless of collimation or centering.*



**NEW!**

# OEC<sup>®</sup> 9800 Plus with Motorization (9800 MD) Taking Your C-arm Beyond Mobile Imaging



For years GE has brought the medical field exceptional image quality and system flexibility in a mobile C-arm. Today, GE pushes the boundaries again with the introduction of the OEC 9800 MD.

The OEC 9800 MD is a new, fully-motorized imaging system with unique lateral and orbital movement allowing the physician tableside control. It's the only system to put 1k<sup>2</sup> high resolution digital imaging quality and ease of use at your fingertips.

The OEC 9800 MD. Superior image quality. Ease of use. And clinical productivity. It's everything you'd expect from the leader in mobile imaging technology.



## Motorized C-arm Movements

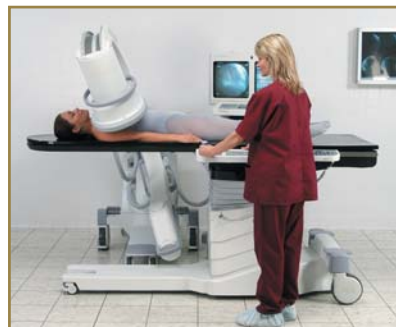
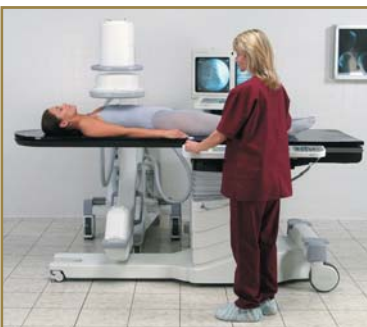
- 9°/sec Orbital (148°).
- 9°/sec Lateral (279°/90°).
- Vertical motorized lift.
- C-arm angle displayed real-time on left hand monitor.

## Table-side Control Panel

- Joystick to control C-arm movement.
- C-arm system controls.
- One user - you are in control.

## Collision Protection System

- Detection bumper on I.I. for patient safety.
- Audible and visual warning when contact is detected.



## Improved Patient Throughput

- New high heat capacity X-ray tube.
- Increased fluoro on-time.
- Proprietary heatpipe cooling technology with ducted fan cooling system.

# Simple to Use

## Intuitive Touchscreen Simplifies Operation

Simply plug in the system and turn it on. The patient annotation screen is ready to receive information. To fluoro, select the desired imaging mode, then simply press the X-ray exposure switch on the remote hand control, mainframe or footpedal control. The OEC 9800 Plus automatically sets all imaging parameters to obtain the optimum image...even in roadmap and subtraction procedures!

- Enter and retrieve patient information.
- Select image manipulation functions.
- Annotate images.
- Make hardcopy films or paper prints.



## Back-lit C-arm Control Panel

- Conveniently located on both sides of the C-arm chassis.
- Backlit for easy operation in the darkened operating room setting.

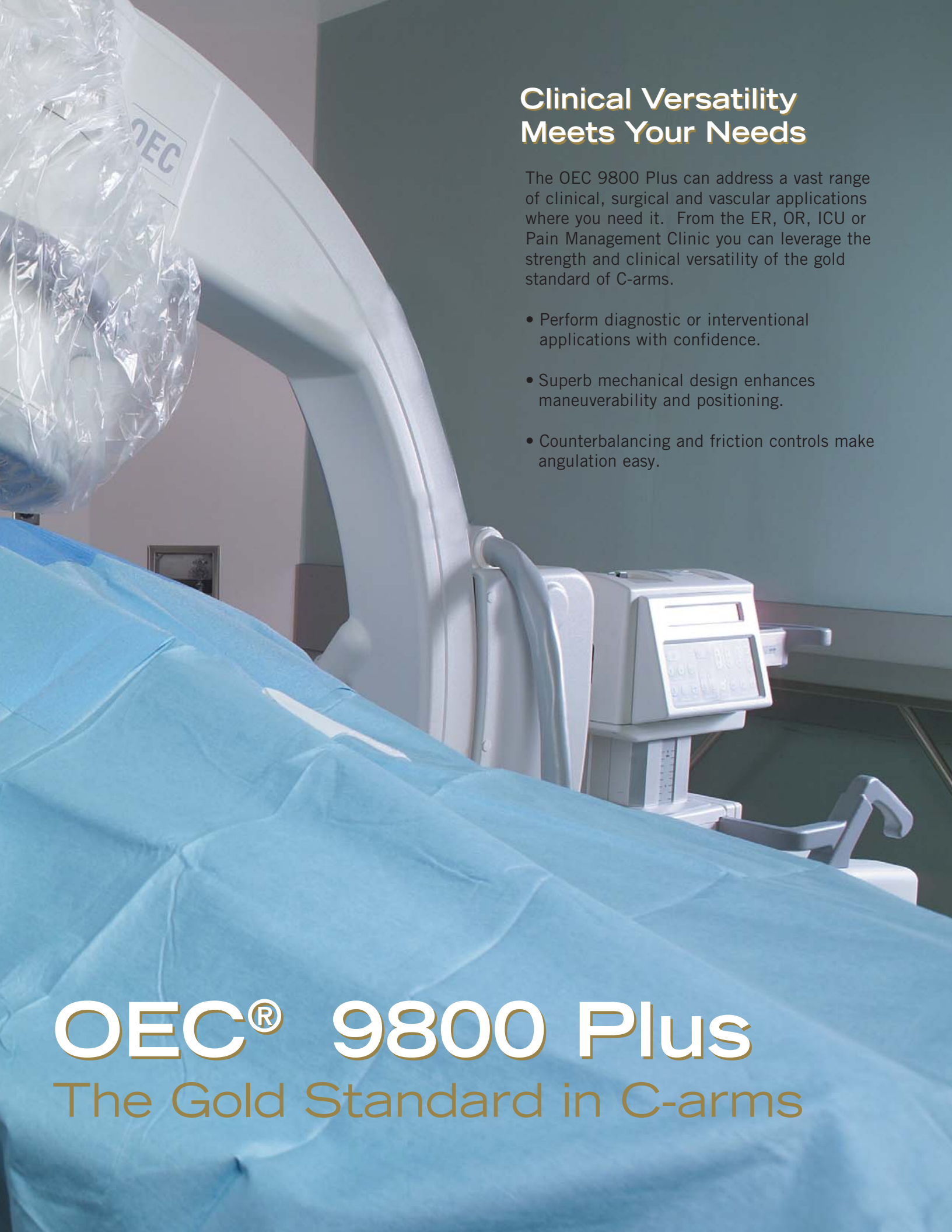


## Easy Positioning (Non-Motorized C-arms)

- Easier, faster mechanical positioning.
- Counterbalancing and friction control for AP & lateral movement, orbital rotation & head-to-toe angulation.
- The C maintains its position after placement, even before the brakes are applied.







## Clinical Versatility Meets Your Needs

The OEC 9800 Plus can address a vast range of clinical, surgical and vascular applications where you need it. From the ER, OR, ICU or Pain Management Clinic you can leverage the strength and clinical versatility of the gold standard of C-arms.

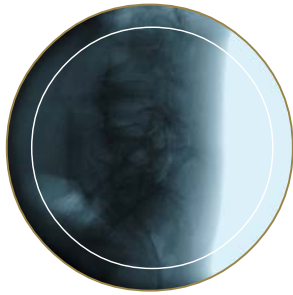
- Perform diagnostic or interventional applications with confidence.
- Superb mechanical design enhances maneuverability and positioning.
- Counterbalancing and friction controls make angulation easy.

# OEC<sup>®</sup> 9800 Plus

The Gold Standard in C-arms

# Premium 1k<sup>2</sup> High Resolution Imaging

## Image I.Q.



Conventional Image



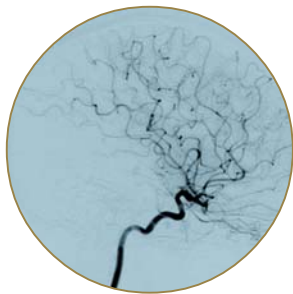
Image with Smart Window



Metal Introduced



Smart Metal Enabled



Digital Subtraction



Roadmapping



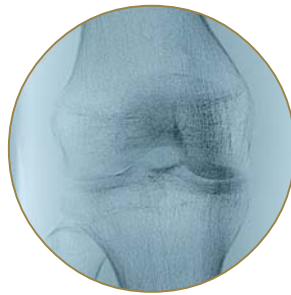
Iris Collimation



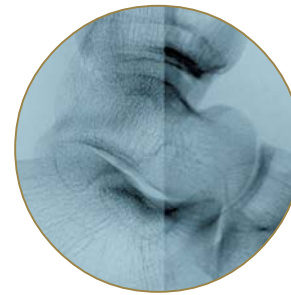
Dual-Leaf Collimation



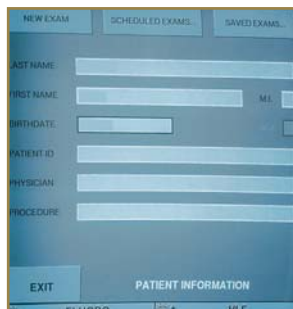
Normal



Digital Zoom



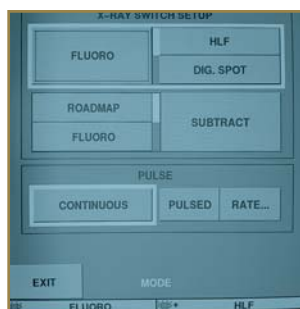
Realtime Edge Enhancement



Patient Information



9 on 1 image Collage



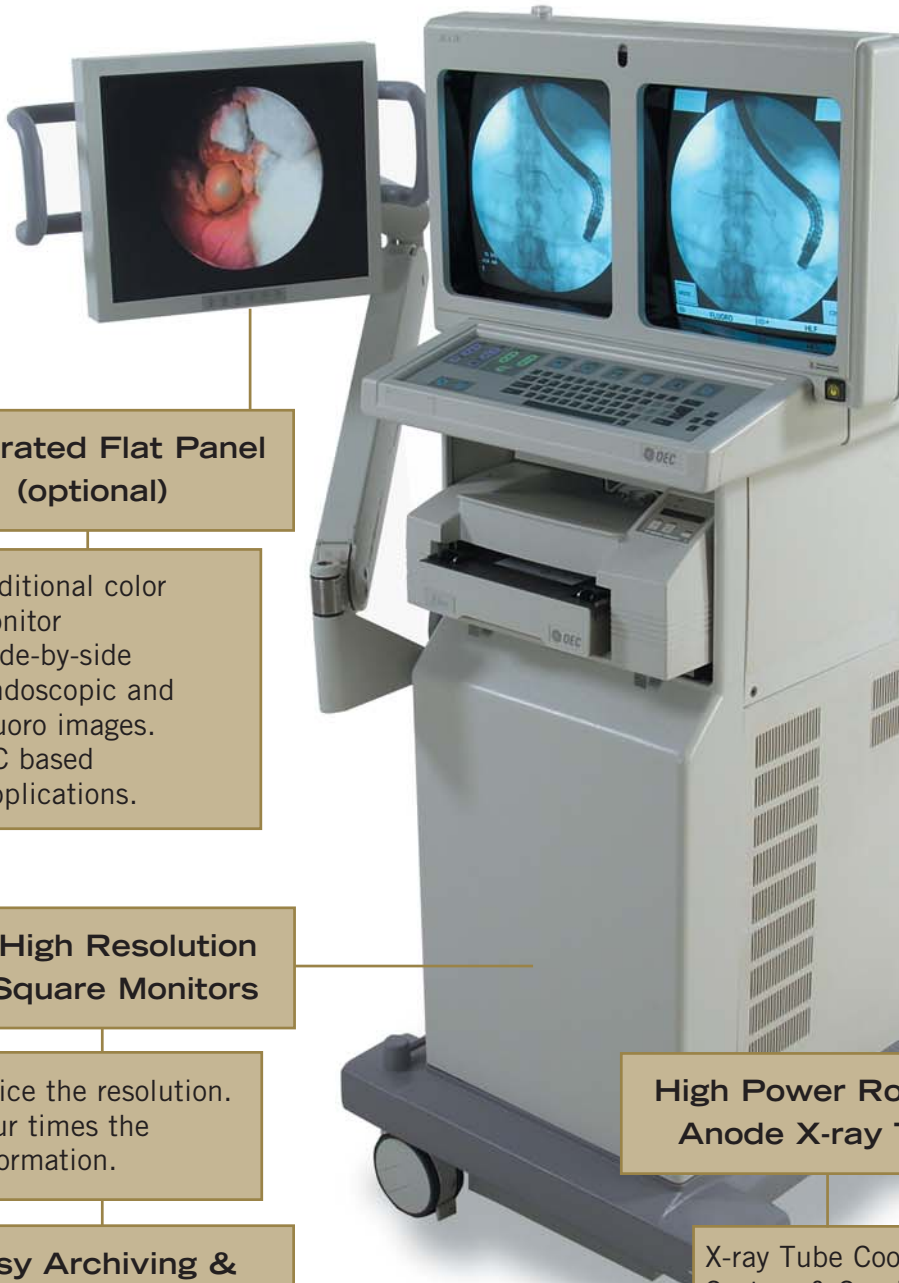
Vascular Imaging Modes



Dose Summary



# OEC<sup>®</sup> 9800 Plus



## Integrated Flat Panel (optional)

- Additional color monitor
- Side-by-side endoscopic and fluoro images.
- PC based applications.

## 1k<sup>2</sup> High Resolution 16" Square Monitors

- Twice the resolution.
- Four times the information.

## Easy Archiving & Documentation

- DICOM 3.0 Internal Interface.
- Removable Cine Disk.
- Paper or Hard Copy Film.

## High Power Rotating Anode X-ray Tube

X-ray Tube Cooling System & Smaller Focal Spots for longer fluoro on times.



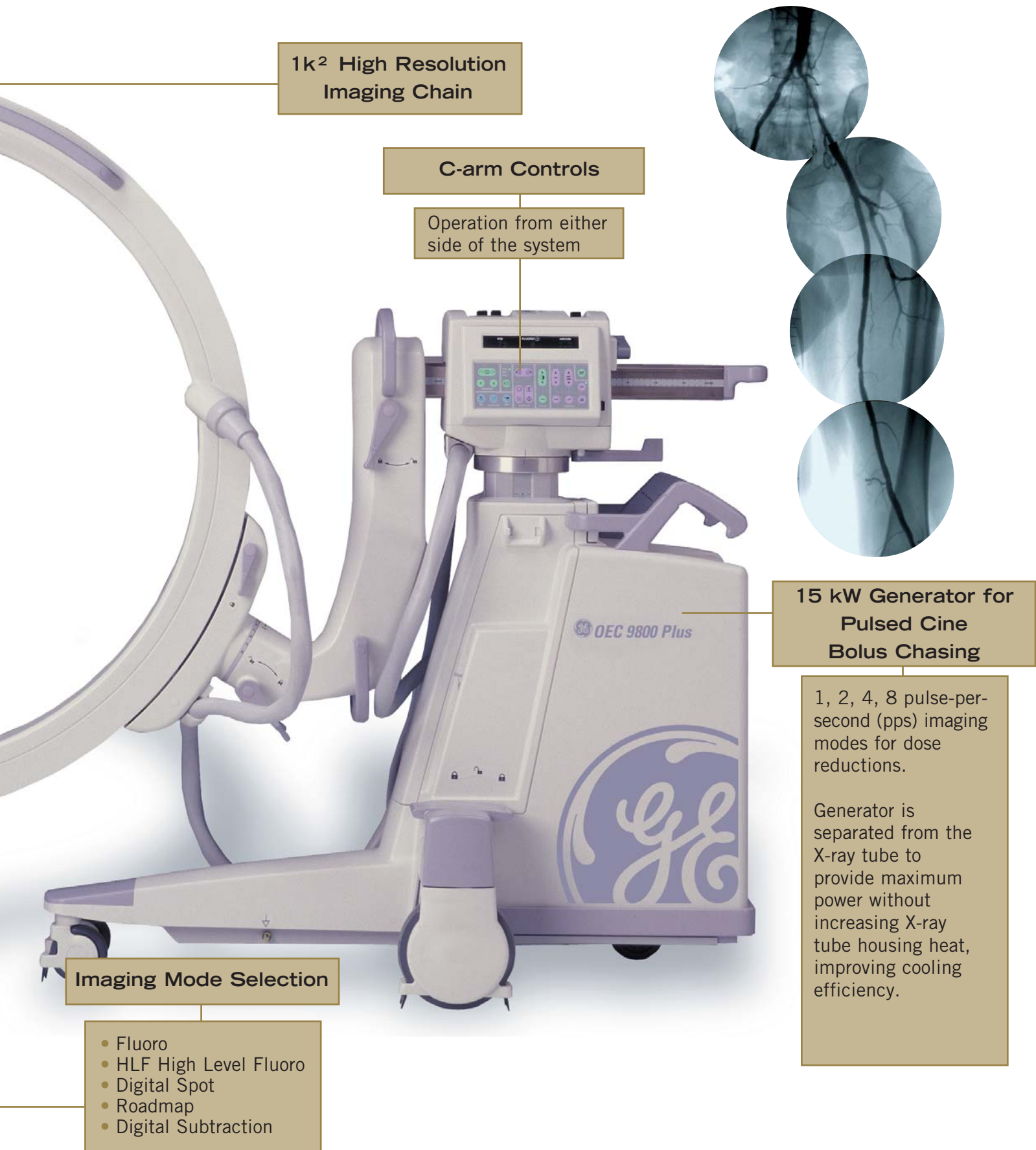
High Resolution 9" (23 cm)  
Tri-Mode Intensifier  
9"- 6"- 4" (23, 15, 10 cm)  
Modes.



Physician Controlled  
X-ray Footswitch  
& Handswitch



# Digital Mobile Imaging System



1k<sup>2</sup> High Resolution Imaging Chain

C-arm Controls

Operation from either side of the system

15 kW Generator for Pulsed Cine Bolus Chasing

1, 2, 4, 8 pulse-per-second (pps) imaging modes for dose reductions.

Generator is separated from the X-ray tube to provide maximum power without increasing X-ray tube housing heat, improving cooling efficiency.

Imaging Mode Selection

- Fluoro
- HLF High Level Fluoro
- Digital Spot
- Roadmap
- Digital Subtraction

# Premium Performance & Value



Standard C 9" (23cm) I.I.



Standard C 12" (31cm) I.I.



Super C 9" (23cm) I.I.



Motorized Super C 9" (23cm) I.I.

## OEC® 9800 Plus Configuration Options

The OEC 9800 Plus is available in a number of configurations, allowing you to select the product features that best meet your clinical needs:

### Orthopedics, General Surgery

9800 GSP  
9800 ESP  
9800 ESP 8 F/S  
9800 ESP 15 F/S (12 F/S @ 50 Hz)

- For orthopedics, general surgery, GI, pain management and other general applications.

### Peripheral Vascular

9800 Vascular 8 F/S  
9800 Vascular 15 F/S (12 F/S @ 50 Hz)

- For vascular surgery and interventional vascular applications.
- 12/9/6" (31/23/15 cm) tri-mode image intensifier: A larger field of view than our standard 9/6/4" (23/15/10 cm) image intensifier, for many vascular applications or wherever a larger field of view is required.

### Neurovascular

9800 Neurovascular 30 F/S (25 F/S @ 50 Hz)

- For interventional neuroradiology and neurosurgery.

### Cardiac Surgery and Mobile Cardiac Cath lab

9800 Cardiac 30 F/S (25 F/S @ 50 Hz)

- For complex coronary, peripheral or abdominal angiography.
- Super-C design: Larger than our standard C, the Super C design provides greater clearance and greater range of overscan for the oblique angulations required in both cardiac and spine work (9" (23 cm) I.I. only).

### 9800 MD C-arm - Super C only

- 9°/sec. Orbital Motorized Rotation.
- 9°/sec. Lateral Motorized Rotation.
- RUI (Remote User Interface - Table Side Control Panel)
  - All 9800 Mainframe Controls.
  - Image Review Functions.
  - C-arm Motion Joystick Control.
  - Motorized Vertical Lift.
- Contact/Collision Detection.
- C-arm Angle Display - real-time and saved images.

# Advanced Patient Information Management

## Built-in DICOM Connectivity

The OEC 9800 Plus is available with an integrated DICOM 3.0 interface that connects to a hospital's network system.

- Improved image and patient information management.
- Query hospital network (DICOM worklist).
- Send images to the hospital's central archiving system, or any network printer or laser camera.
- Use OEC's trademarked C-View™ software to review from any PC.



## **NEW!** Medical Digital Recorder™ DVD and CD Burner\*

DVDs and CDs can now be produced from your 9800 Plus mobile C-arm. Disk media can be produced at one-fourth the cost of film, one-fifth the cost of SVHS and one-tenth the cost of DAT tape. Plus, discs can record an amazing amount of data: more than 700 single images on one CD; more than 5,000 single images or two-and-a-half minutes of streaming video on one DVD. \*\*

*\*\* Typical capacity dependent upon image format and file size. Based on typical image resolution in uncompressed image format.*





## Consumables & Supplies

For OEC Systems

All GE drapes and sterile covers for OEC equipment are custom designed to provide a tight fit with minimal excess plastic for full equipment protection during urology, cardiology or surgical procedures.

Each drape or cover is made of durable polyethylene material for quick and easy cleanups. Order a consumables pack for a complete set of equipment covers for one procedure, or order items individually as you need them.

To order your Accessories and Supplies in the U.S. call 1-800-874-7378. For purchases outside of the U.S. contact your local Sales Representative.

# ge



### **NEW! OEC MiniPACs\***

Image access and communication has never been easier! Imagine being able to easily archive patient images into one central patient record with the push of a button. No more floppy disks or CDs to juggle. Now you can automatically attach images with annotations, as well as voice and video recordings to patient record templates.

Create fully customizable patient image databases, email digital reports to referring physicians, or create peer review board presentations. This Windows® based system is easy to use and can be used to manage images from a variety of sources, OEC 9800 Plus, OEC MiniView 6800, OEC UroView 2800, UltraSound, MRI, CT.



### **NEW! OEC HIPAA SecureView®\***

The pressure to keep patient information confidential is nothing new to hospitals or GE. Our new OEC HIPAA SecureView® compliance feature for your OEC 1k<sup>2</sup> workstation shows our continued commitment to your need for patient protection.

- Password Protection - At boot up, user is asked to enter a password to access the main menu.
- Blank Screen Function - A button is located on the main keyboard that will allow the operator to blank the screen showing patient information. Image will be restored upon pushing any key on the keyboard.
- Delete All - A two-step process to erase all cases and data on the workstation recording disk.
- DICOM Library Function - Enables a hospital DICOM network to differentiate between multiple 1k<sup>2</sup> workstations. This will allow users to know which system the information comes from (station name).



### **Paper or Film Hard Copies Instantly!\***

- Optional on-board instant film and paper printer.
- Hard copy documentation without darkroom film processing.
- Laser camera quality images.

*\*Available as an option with all 9800 Plus configurations*

# Value of a Leader



## World-Class Products, Training & Service Quality, Reliability, Plus Dependable Service

In the event you need service help, we have created several different levels of service and support to ensure that your system is ready when you need it while still meeting your budget.

- QuantaCare - Customized Full Service Plans.\*
  - Unlimited labor and parts
  - Prompt phone response
  - Rapid on-site engineering support
  - Expedited parts replacement
- FlexiCare-PM Preventive Maintenance Plans.\*
  - Annual OEM inspections
  - 20% discount on materials and labor

## Clinical Support and Training GE Understands Your Needs

Clinical operator training is included with each and every OEC 9800 Plus.

- On site Clinical Imaging Specialist during installation.
- In-service instruction for your staff provides CE credits for continuing education requirements.\*

## Highest Quality Standards

- ISO-9001 or ISO-9002 registration for all of its facilities.
- The highest quality standards accepted by the worldwide community.



GE's OEC products carry the following safety approvals:



\*Service options may vary outside the United States.

For more than 100 years, healthcare providers worldwide have relied on GE Medical Systems for medical technology, services and productivity solutions.

So no matter what challenges your healthcare system faces - you can always count on GE to help you deliver the highest quality healthcare.

For details, please contact your GE representative today.



## GE Medical Systems

General Electric reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Representative for the most current information.

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