Now, a C-arm smart enough for you and your team.

OEC Elite™ CFD
Premium Mobile C-arm

This is more than just another C-arm, this is INGENIOUS

OEC Elite CFD
Premium Mobile C-arms
Now, a C-arm smart enough for you and your team.
Introducing OEC Elite CFD with,

**Ingenious FD on Board**
CMOS: The right mobile flat detector technology

**Data-Rich Imaging**
See what you need to see: The power behind high IQ

**Intelligent Dose Control**
Delivering on the promise of FD: High IQ at low dose

**Smart Flow**
Ease and efficiency: Designed for a more intelligent workflow

**Platform for your Future**
Build on a legacy of innovation

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**OEC Elite CFD**
Premium Mobile C-arms
INGENIOUS FD ON BOARD

The Right Mobile Flat Detector Technology
INTRODUCING CFD:
THE INGENIOUS CMOS FLAT DETECTOR

At last, a more efficient panel that delivers better image quality at low dose.

Flat panel detector (FD) technology has long promised IQ at low dose: the ability to deliver images that have the resolution, clarity, contrast, and lack of artifact, at the conscientious dose levels you and your patients demand. The ingenious flat panel detector available on board the OEC Elite CFD is an exclusive, high-efficiency CMOS flat detector (CFD). Combined with the advanced technology in our newest C-arm design, the CFD empowers you to go beyond the low dose imaging trade-offs that have characterized mobile FDs for a decade. The CMOS flat detector, specifically for full-size mobile C-arms, is exclusive to GE OEC and it’s what you’ve been waiting for in a mobile FD C-arm.

CMOS: the right mobile FD technology.

ULTRA-EFFICIENT CRYSTALLINE STRUCTURE
Puts an end to frame rate/resolution compromises.

SUPERIOR ELECTRON MOBILITY
Improves clarity by eliminating visible lag.

ACTIVE PIXELS
Eliminates the need for bulky amplification electronics, resulting in a small, compact detector.

IMPROVED SIGNAL TO NOISE RATIO
Results in higher IQ in low dose conditions.
DATA-RICH IMAGING

The Power Behind High IQ
Data-rich imaging begins with our exclusive CFD—the only flat detector with 1.5 k x 1.5 k resolution for 21 cm x 21 cm and 31 cm x 31 cm panels—and ends with distortion-free images that can dazzle your eye with superb anatomical detail.

DATA-RICH IMAGING

MORE COMPLETE IQ: SEE WHAT YOU’VE BEEN MISSING

Data-rich imaging delivers visual information that you may have been missing with image intensifiers or competing flat panels including motion in between pulse frames, full resolution at full frame rates, and anatomic detail formerly lost in bloom, lag, or noise. OEC Elite CFD is designed to give you a more complete picture.

AN END TO FULL RESOLUTION/FRAME RATE COMPROMISES.
OEC Elite CFD is the only flat detector to offer you the continuous fluoroscopy capability you’ve relied on with your image intensifier—and it does it with higher resolution. The CFD’s ultra-efficient crystalline structure processes and transfers data in real time to process full resolution images at full frame rate (30 fps).

SMOOTH MOTION WITHOUT GAPS BETWEEN FRAMES.
Only true continuous fluoroscopy without pulsing captures detailed anatomy without the distraction of the stutter, lag, or ghosting that characterizes “continuous pulse” fluoroscopy images. Only true continuous fluoroscopy gives you the confidence that comes from knowing you won’t miss anything between frames when placing k-wires, retrieving kidney stones, or seeing a 0.008 guidewire in peripheral vascular procedures.

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HIGHER DYNAMIC RANGE. MORE ANATOMICAL DETAIL.
With a higher dynamic range at both high and low dose, the OEC Elite CFD captures more data, revealing precise anatomic detail of varying densities. By processing more than 65,000 shades of gray, you have the differentiation you need between lung, heart, and bone tissue when placing a guide wire in the chest.

RESPONSIVE SMART METAL. NO BLOOMING ARTIFACTS.
OEC Elite CFD’s Smart Metal responds immediately to the introduction of metal to the field, maintaining a high dynamic range without the interruption of bloom.

CLEAR IMAGES WITHOUT LAG OR GHOSTING.
With the CFD’s superb electron mobility, OEC Elite CFD eliminates the lag between images (common with less efficient panels) that can cause anatomy from a previous image to “ghost” a current image.
SQUIRCLE PRESERVES 100% FOV EVEN WHEN ROTATED.

There is no change in the field of view when OEC Elite CFD's unique squircle is rotated. None. Zero. The full image is rotated with no change in aspect, size, measurement, or cropping. Squircle enables you to view all of the imaged anatomy. For example, when you rotate an anterior hip image, you won’t crop the acetabulum and will maintain a full-size view of all imaged anatomy. With squircle, what you see is what you get—no matter how you rotate it.
COMPACT DETECTOR. CAPTURES LARGEST FIELD OF VIEW.

ACTUAL SIZE 21cm x 21 cm OEC Elite CFD

ACTUAL SIZE 31cm x 31 cm OEC Elite CFD
INTELLIGENT DOSE CONTROL
Driven By You
VERSATILITY AND CONTROL: EMPOWERING YOU TO OPTIMIZE DOSE AND IMAGE QUALITY

OEC Elite CFD introduces a new level of intelligent dose control. Intelligent because it puts more control in your hands: the person who best knows the priorities for each procedure, patient, and image. With a broad range of orthopedic, vascular, and general surgery controls, OEC Elite CFD gives you the ability to manage dose and image quality independently—empowering YOU to choose the optimum balance.

MORE CONTROL. MORE DOSE OPTIONS.

OEC Elite CFD offers five modes of dose control that can be used alone or in combination to give you the technique you need for each image.

Digital Spot  •  High Level Fluoroscopy  •  Standard Fluoroscopy  •  Low Dose  •  Pulse

Choice gives you control. For example, when performing urological procedures, in keeping with ALARP, you may select an acquisition using both low-dose and pulse modes. By using these two features in combination, an almost 90% reduction in dose rate is achieved. For stone removal, you may require real-time imaging, for which, if the case allows, you may select low-dose mode for the continuous fluoroscopic acquisition. Selection of low-dose mode for producing uninterrupted imaging, results in a greater than 50% reduction in dose rate.

CONVENIENT PROFILES. INDEPENDENT CONTROL.

OEC Elite CFD’s convenient selectable imaging profiles—general surgery, spine orthopedics, bolus chase, and vascular—are designed to automatically optimize imaging but leave dose control to you. OEC Elite CFD’s dose settings do not automatically adjust up or down when changing profiles.

\(^1\) use of these modes will affect image quality
CMOS IS ENGINEERED FOR GREATER SENSITIVITY

a-Si has sufficient efficiency for fixed-room systems, but its random molecular structure may be challenged by mobile’s characteristically photon-starved environment. GE’s CFD was designed for performance in the mobile environment. Its crystalline structure has superb sensitivity, resulting in a higher DQE at low dose.

DELIVERING ON THE PROMISE OF FD: HIGH IQ AT LOW DOSE.

OEC Elite CFD is the first premium mobile C-arm to deliver on the promise of FD technology: achieving high IQ at a low dose. With the increasing number of minimally invasive procedures that depend on high quality imaging, reducing dose to the patient and the surgical team has become even more important. OEC Elite CFD’s exceptional performance comes from its Ingenious Flat Detector with CMOS technology—designed for mobile imaging.

EXCEPTIONAL LOW DOSE PERFORMANCE

OEC Elite’s CFD is more efficient than other flat panels that use amorphous silicon (a-Si) FD technology. CMOS crystalline structure drives this efficiency, converting more X-ray photons into the electrons needed to create an image, and minimizing electronic noise. Because there is less electronic noise, OEC Elite CFD has a higher signal-to-noise ratio (SNR) even under low dose conditions.

Increased SNR yields higher detective quantum efficiency (DQE). Higher DQE means that the OEC Elite CFD gives more efficient imaging performance per unit of radiation dose and means you can get better image quality under low dose conditions. Images are brighter so you can see finely attenuated anatomy even in dense tissue without having to turn up the technique and increase dose.

WHY CMOS IS THE RIGHT TECHNOLOGY FOR MOBILE:

1. MOBILE C-ARMS ARE PHOTON STARVED
With a fixed-room system, more of the radiation produced reaches the detector because a hardened X-ray beam passes through the patient with little absorption or scatter. A mobile C-arm, without the benefit of three-phase power and additional filtration, is unable to produce a hardened beam, and thus, less radiation reaches the detector. The mobile detector is starved for radiation photons.

2. MOBILE FLAT DETECTORS ARE LIKE CAMERAS SHOOTING IN LOW LIGHT
In a photon-starved environment, a flat detector must be highly efficient to make the most of every photon. It’s similar to a camera’s performance in a low-light environment. If the camera isn’t sensitive enough to get a quality image, you use a flash. If a flat detector isn’t sensitive enough to get the image you need, you must increase dose to get more photons to the detector.

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HIGH DYNAMIC RANGE AT HIGH AND LOW DOSE

With the ability to capture both high and low intensity simultaneously, the OEC Elite CFD’s dual-well pixel design gives high dynamic range. This high dynamic range delivers a full range of light and dark for every image no matter what level of dose. Even under low dose conditions you are able to visualize anatomy of varying densities simultaneously—bone, soft tissue, injected contrast and the skin surface.

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SMARTFLOW
A More Intelligent Workflow
DESIGNED FOR A MORE INTELLIGENT WORKFLOW

Since creating the first OEC C-arm, we’ve supported thousands of surgical teams worldwide, gaining unique insight into what helps high-performing teams complete procedures more efficiently.

OPEN DESIGN. BETTER COMMUNICATION.
We've learned that at the center of a smarter workflow is clear communication. OEC Elite CFD’s lean workstation and streamlined CFD are part of an insightful, open design that can minimize obstructions and improve line of sight in even the smallest O.R.s. Your team—both in and out of the sterile field—is better able to visually connect with you and anticipate your needs. This can lead to more efficient procedures.

COMPACT DETECTOR. IMPROVED EFFICIENCY.
The compact detector also creates a more ergonomic environment—with less to get in your way. Whether it’s better access to anatomy that enables faster positioning, or better access to your work area—OEC Elite CFD’s small, thin CFD makes it easier for you and your team to work efficiently.
INDEPENDENT WORKSTATION.
TURNOVER EFFICIENCY.
With a live connection that allows you to disconnect and reconnect the C-arm and workstation, SmartConnect makes OEC Elite’s workstation operationally independent and can improve room turnover and productivity.

LIGHTER WEIGHT.
MOVES EASILY.
OEC Elite CFD is more maneuverable than current GE OEC systems. The workstation is 100+ lbs (45+ kg) lighter and has low resistance wheels. The C-arm requires 30% less force to steer.

THE SYSTEM THAT MOVES—SO YOU DON’T HAVE TO
Crowded O.R.s can make re-positioning a challenge. That’s why OEC Elite’s positioning capabilities and C-arm overscan range are designed to enable you to capture difficult, optimal angle views with fewer positioning adjustments. The versatile movements of OEC Elite’s articulating monitor arm give you greater flexibility when it comes to positioning the workstation.

EASE AND MANEUVERABILITY FOR AGILE TEAMS
Years of GE OEC observational research revealed that agile teams work smarter. So, the goal with OEC Elite CFD was to make it possible for your team to move faster and with less effort. With a lighter-weight workstation, SmartConnect, and a simple user interface, OEC Elite CFD is designed to contribute to your team’s agility.

SMARTFLOW
Simplified Interface.
Recognizable GE OEC Sequences.
Inspired by smart tablet design, the intuitive interface includes features such as active icons and auto-complete to minimize keystrokes and speed your progress through recognizable GE OEC sequences.

SmartConnect.
Independent Workstation.
Turnover Efficiency.
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SmartView.
Efficient Positioning.
See the true lateral view regardless of spatial constraints with the articulating OEC Elite SmartView pivot joint. The unique fluid movement allows you to position at just the right angle without moving the C-arm base.

55° of Overscan.
Easy Rollover Views.
OEC Elite CFD offers choice in C-arm capabilities with Super C or Ergo C-arm. Both C-arms offer 55 degrees overscan for positioning easily for oblique spine angle views.

Smartflow.
The System that Moves—So You Don’t Have To.
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Articulating Monitor.
Comfortable Viewing.
OEC Elite’s articulating arm brings the monitor closer to you by extending, tilting, and rotating to enable comfortable viewing from all four sides of the workstation.

Lighter Weight.
Moves Easily.
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PLATFORM FOR YOUR FUTURE

Built on a Legacy of Innovation
ADVANCING SURGICAL CONFIDENCE...TOGETHER. OEC ELITE CFD.

When you see the most delicate guide wires, tiny stones or fractures during your first procedure with OEC Elite CFD, you’ll see more than your patient’s anatomy with clarity; you’ll see the future of mobile surgical imaging. A future where your team’s performance can be smarter and more efficient, and your facility’s productivity can increase with better throughput and uptime. A future where you’ll know that you’ve made the right choice with OEC Elite CFD.

LONG LIFE. HIGH VALUE.
GE’s OEC systems are built to last. More than 23,000 OEC premium C-arms remain hard at work, averaging close to 15 years after their first procedure. That remarkable reliability contributes to the industry’s highest residual value: averaging over 200%* higher trade-in value than industry average. From beginning to end, your GE OEC investment performs.

SYSTEM UPTIME. O.R. PERFORMANCE.
OEC Elite CFD’s engineered simplicity—including its one-brain architecture—is designed to reduce maintenance requirements further, giving you the confidence to book tight surgical schedules and meet your patients’ expectations of on-time treatment.

ELITE PERFORMANCE. EFFICIENT O.R.
Now, with OEC Elite CFD’s smart interface, SmartConnect feature, and communication-enhancing design, your elite-performing teams can save even more time every day. When shorter procedures become the norm, you can add procedures to increase revenue and patient satisfaction.

EXPERT SUPPORT TEAMS. OUTSTANDING COVERAGE.
Your GE OEC Clinical, Service, and Sales experts are committed to helping you get the most out of your OEC Elite CFD with comprehensive training programs, ongoing clinical support, and service guarantees.

VERSATILE MODELS. SCHEDULING IMPACT.
There’s a model to fit the specific needs of your Spine, Advanced Orthopedics, Vascular, Urology, General Surgery and Pain Management teams. Regardless of model, OEC Elite CFD’s superb imaging and simplicity make it the go-to C-arm, providing you with scheduling flexibility.

* Residual value calculated with a comparative value calculator. Represented equipment values in this tool were determined based on GE Healthcare’s periodic assessment of market value as of July 2017. The values are provided for illustration purposes only and not an offer to purchase. Actual values will vary and you are invited to independently verify any information provided. Industry average includes comparable competitive C-arms.
OEC Elite CFD

- **CRISP**
  4K UHD 32” Display

- **ERGONOMIC**
  Articulating Monitor Extends Up To 27”
  With Full Range of Motion

- **SIMPLE**
  Intuitive OEC User Interface

- **SQUIRCLE**
  Preserves 100% of FOV Even When Rotated

- **MANEUVERABLE**
  Lightweight Slim Design Workstation

- **CONVENIENT**
  Storage Bay for printers or accessories

- **PRODUCTIVE**
  SmartConnect – Disconnect and Reconnect C-arm Without Rebooting

- **DESIGNED FOR MOBILE**
  Proprietary CMOS Flat Detector (CFD)

- **COMPACT**
  Small Form Factor Panel Housing

- **LARGE FOV**
  21 cm x 21 cm or 31 cm x 31 cm CFD

- **SMOOTH**
  True Continuous Fluoroscopy

- **CLEAR**
  Full 1.5 k x 1.5 k x 16 Bit Image Processing at 30 fps

- **CONVENIENT**
  TechView Monitor

- **PRECISE**
  Integrated Laser Aimer

- **DOSE CONSCIOUS**
  Finger Removable Anti-Scatter Grid

- **MORE FREE SPACE**
  55° Overscan

- **AGILE**
  30% Less Force to Steer

- **COOL**
  Advanced Cooling Technology

- **LEAN**
  Low Profile X-ray Tube

*Availability of select models, configurations, and options varies by country.
Please contact your local sales representative.

OEC Elite CFD performance in a variety of clinical applications to meet your specific needs.

ORTHOPEDIC • SPINE • GENERAL SURGERY • UROLOGY • PAIN MANAGEMENT • VASCULAR