### **Cios Fusion**

Fuse surgical versatility with Full View FD

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### **Contents**

Excellence in all aspects	4
160% more to see – with Full View FD	7
Save time – with advanced tableside control	8
Drive surgical revenue – with innovative technology	10
Cios Fusion – an image gallery	12
The right power – whenever and wherever you need it	13
Cios Fusion – Fuse surgical versatility with Full View FD	14
Experience why detail matters	17

### **Excellence in all aspects**

### From Full View FD imaging and system handling to clinical versatility

To stay competitive, clinical institutions have to keep pace with the prevailing trends across a vast range of surgical disciplines. Most clinical institutions, however, don't fully tap the potential of their OR because they lack the proper equipment. This can have severe consequences, including incorrect image interpretations and therapy decisions as a result of low image quality.

Increase the competitiveness and surgical versatility of your institution by introducing innovative imaging technologies into your OR – with Cios Fusion. Equipped with our Full View FD technology and unique Retina Imaging Chain with IDEAL (Intelligent Dose Efficiency Algorithm) dose reduction, the mobile C-arm provides large, crystal-clear, distortion-free images at the right dose. Showing even the smallest anatomical details in sharp quality, Cios Fusion can increase confidence in image interpretation and thus help you increase the quality of care.

Cios Fusion's compact and lightweight design enables your staff to easily move the system wherever they need it. They can even control it directly via a remote user interface from within the sterile field, resulting in increased precision and time savings. In addition, by providing cutting-edge technologies for advanced surgical care, your institution can increase its attractiveness to both patients and staff.

Designed to support you in your work, Cios Fusion is your true partner in performance.



**160% more to see**<sup>1</sup> – with Full View FD



Save time – with advanced tableside control<sup>2</sup>



**Drive surgical revenue –** with innovative technology

<sup>&</sup>lt;sup>1</sup> Compared to today's conventional 23 cm / 9 inch image intensifiers

<sup>&</sup>lt;sup>2</sup> Optional





## 160% more to see<sup>1</sup> – with Full View FD

Often, the limits of existing technologies do not allow for the best possible image coverage and case evaluation. This can require additional exposures, resulting in higher doses for patients and OR staff.

Improve your clinical outcomes from standard trauma to advanced vascular surgery by seeing crystal-clear anatomical details in Full View FD – at low dose.

#### Clear view at very low dose

Having a good overview of as many detailed structures as possible supports fast and confident surgical decisions. That's why we equipped Cios Fusion with optimally sized flat detectors<sup>2</sup> and Full View FD for an up to 160% larger field of view<sup>1</sup>. Anatomical details are clearly visualized in distortion-free images, regardless of patient size. Dose, contrast, and brightness are optimally balanced by our unique Retina Imaging Chain with IDEAL (Intelligent Dose Efficiency Algorithm) – for large, crystal-clear images at very low dose.

### Intelligent power management

What really counts in surgery is high imaging performance over longer periods, not just for a single shot. Cios Fusion offers intelligent power management for reliable, high-quality, and never-tiring support – with no worries about overheating or image quality degradation.

### Ideal for a versatile surgical spectrum

As a multipurpose C-arm, Cios Fusion matches your surgery requirements and supports your clinical workflow. Benefit from truly digital navigation in ortho and trauma surgery with the NaviLink 2D Interface. Mark anatomical structures directly in the image during vascular surgery using the Live Graphical Overlay. See sharp images during cardiac surgery thanks to fluoro imaging rates of 30 pulses per second. Use the smart collimation to see Full View FD even during image rotation. And easily remove the anti-scatter grid for low-dose pediatric procedures.





SmartView – side-by-side monitor display of fluoroscopic images and images from other modalities

<sup>&</sup>lt;sup>1</sup> Compared to today's conventional 23 cm / 9 inch image intensifiers

 $<sup>^{2}</sup>$  20 cm x 20 cm (8" x 8") and optionally 30 cm x 30 cm (12" x 12")



# Save time – with advanced tableside control<sup>1</sup>

The positioning of cumbersome equipment is time-consuming, inaccurate, and also requires dedicated staff. This can negatively affect process efficiency.

Increase precision and time savings by providing your OR team with a light-weight, compact C-arm that offers easy remote operation from within the sterile field.

### Precise C-arm positioning is key

To increase precision, Cios Fusion lets surgeons directly control the C-arm from within the sterile field – with the remote user interface<sup>1</sup> at the tableside. It can additionally be controlled via the intuitive touch user interface at the monitor cart and C-arm. All interfaces feature a large preview image: for example, for optimized control of collimation and image rotation. Precision can be increased even more thanks to the position storage feature: the C-arm position can be easily defined and recalled at the touch of a button.

#### Keep training requirements to a minimum

The cleverly devised color coding of the axes and brake handles supports intuitive system handling. The combined steering brake lever enables easy system positioning and locking. Your benefit: efficient communication in the OR and low training requirements.



The multifunctional footswitch<sup>1</sup> enables hands-free X-ray release, image capture, and access to all operating modes



The intuitive touch user interface at the C-arm – just one way to control the system



Efficient communication in the OR – color-coded axes and brake handles make orientation easy



The system is easy to handle and position



Monitors can be folded for convenient and safe transportation

### An intelligent system design

Cios Fusion is never in the way. Featuring a counter-balanced C-arm design, it offers extended free space for ideal patient access and positioning flexibility. Compact and lightweight, the mobile C-arm is easy to handle and maneuver.

### Unobstructed view at all times

The two high-bright TFT monitors<sup>1</sup> provide an extraordinarily wide viewing angle. They can be rotated by 180° to significantly reduce the distance to the operating table, allowing a clear view even from a distance. The two monitors are horizontally and vertically adjustable<sup>1</sup> to match any working position. And they can be folded for safe transportation and space-saving parking.

<sup>&</sup>lt;sup>1</sup> Optional

## Drive surgical revenue – with innovative technology

Outdated equipment can lead to frustration and high staff turnover, as well as negatively impact the reputation of healthcare providers.

Enhance your institution's attractiveness to both patients and staff by providing cuttingedge imaging technologies, such as Full View FD technology, that enable advanced surgical care.

### Premium technologies for advanced surgical workflows

Introduce the latest, cutting-edge technologies from the high-end segment into your OR – from Full View FD for a larger field of view and the remote user interface<sup>1</sup> at the tableside for increased precision to the touch user interface for intuitive system control. The Live Graphical Overlay<sup>1</sup> even allows surgeons to directly mark anatomical structures in an image in all operation modes.

### Innovative vascular support

The unique stenosis quantification software calculates the degree of a stenosis. It automatically analyzes the vessel and evaluates the

minimum value in relation to a reference value. The software then displays the geometric and densitometric parameters of the stenosed vessels for simple and effective intraoperative control.

### Always in harmony

Create a pleasant work environment with the EMotion<sup>†</sup> onboard sound system. By simply connecting an MP3 player, your staff can listen to their favorite music during procedures.

### Advanced connectivity, seamless integration

Cios Fusion seamlessly integrates into your hospital network via LAN or WLAN<sup>1</sup>. Up to 150,000 images can be directly stored on the system. These can be saved in DICOM format on CD, DVD, and USB for comprehensive patient documentation. In addition, with the NaviLink 2D Interface<sup>1</sup> you benefit from truly digital navigation for increased accuracy. With the HD VideoManager<sup>1</sup> and the Videosplitter<sup>1</sup>, you can also connect external video sources – such as endoscopy and ultrasound – and external monitors to see supplementary image information.

### Metal implants - no problem

Large metal implants can affect the visibility of surrounding tissue. The optimized metal correction function provides enhanced visualization even under difficult conditions.



Seamless integration into your hospital network via LAN or WLAN<sup>1</sup>



Easy data storage on CD, DVD, and USB



Live Graphical Overlay<sup>1</sup> – better orientation by marking anatomical structures directly in image

<sup>1</sup> Option



## Cios Fusion – an image gallery









Pelvis

Thoracic spine

Tibia proximal





Fibula distal

Clavicle

Femur proximal

Courtesy Klinikum Nuremberg Courtesy BG Unfallklinik Ludwigshafen

## The right power – whenever and wherever you need it

In the OR, a mobile C-arm must answer various power needs. These can be categorized as static imaging for documentation, dynamic imaging for acquiring an imageseries – for example, moving objects – and long-lasting procedures.

Each of these applications involves different challenges. It takes the right combination of a range of factors to ensure reliable, high-quality, never-tiring support. Cios Fusion supports your work with intelligent power management built in – always setting the right

parameters according to the organ program selected. For static imaging, Cios Fusion utilizes its maximum peak power for crisp images. To avoid motion blur in fast, dynamic images, it combines high frame rates with a low minimum pulse width. And if you need longlasting power, Cios Fusion prevents overheating with its heat capacity management – to give just one example.

Whatever your requirement – Cios Fusion is your true partner in performance.

"I really have to admit that I've never seen such good bone structure in an intraoperative image. The colleagues from trauma and spine surgery will need that C-arm. If they can get it, they will want to have it."



Paul A. Gruetzner, MD Head of the Department of Orthopedics and Trauma Surgery BG – Klinik Ludwigshafen, Germany



**Static imaging –** for imaging static objects and documenting surgical result



**Dynamic imaging** – exceptional high maximum tube current in pulsed fluoroscopy mode results in high peak output power



Long-lasting imaging – high maximum average power for prolonged pulsed fluoroscopy and effective heat management

### **Cios Fusion**

### Fuse surgical versatility with Full View FD



### Full view FD technology

160% more image coverage<sup>2</sup> and crystal-clear visualization of anatomical details



### Retina Imaging Chain with IDEAL (Intelligent Dose EfficiencyAlgorithm) dose management

High-quality images at very low dose



### Remote user interface<sup>1</sup>

Operation of the system directly at the tableside from within the sterile field



### 4

### Touch user interface

Completely flexible system control with a large preview image and intuitive operability

### 5

### **Clinical versatility**

Fully integrated workflow support, with features like unique Live Graphical Overlay<sup>1</sup>, SmartView<sup>1</sup>, and injection trigger<sup>1</sup>, to name just a few



### Compact and lightweight design

Easy system maneuvering and positioning and ideal patient access

<sup>1</sup> Option

<sup>&</sup>lt;sup>2</sup> Compared to today's conventional 23 cm / 9 inch image intensifiers



# Cios Fusion

## Experience why detail matters

Around the world,
Siemens Healthineers is known
for innovation power and
technology leadership. All our
medical systems are backed
by more than 125 years of
experience.

Cios Fusion has our in-depth expertise in medical technologies built in and lets you benefit from our innovations.

Full View FD combined with our unique Retina Imaging Chain and IDEAL translates into crystal-clear images at very low dose. The remote touch user interface and color-coded axes, brakes, and handles provide precise and intuitive system handling. With these and other details, Cios Fusion fuses high versatility with exceptional performance.

Cios Fusion: because detail matters.

Transform financial risk into managed costs Balance the risk of system failure against the total cost of ownership for your Cios Fusion with a Protect Plan Complete. Service parts and special components are included in your service agreement, and you can optimize system availability by relying on Siemens Healthineers parts logistics – to transform downtime risk into managed cost. We keep your systems safe, helping to assure your clinical quality by making sure that your systems are kept within the specifications issued by regulatory authorities. If you wish to additionally cover corrective maintenance, a Performance Plan TOP from Siemens Healthineers is the right choice for you.

#### A safe investment

Cios Fusion is a safe investment – thanks to its reliable throughput, long lifecycle, and improved productivity. Based on the well-known engineering and manufacturing excellence from Siemens Healthineers, the mobile C-arm offers innovative technologies for a broad spectrum of surgical procedures. It seamlessly integrates into your surgical workflow and hospital network. The operating elements have the well-known Siemens Healthineers look and feel, which translates into flexible staff usage and minimal training requirements. In short: Cios Fusion is an investment that pays off – by fusing high versatility with exceptional performance.

Notes			

Notes			

Cios Fusion is not commercially available in all countries. Due to regulatory reasons its future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

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