PHILIPS

Veradius Unity

Surgery

Making the difference
with Live Image Guidance

Veradius Unity mobile C-arm system specifications

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1. Introduction

New and complex surgical procedures require surgical teams to work together efficiently and understand the exact nature of critical anatomy. Your X-ray system provides crucial guidance during procedures. Getting consistent high quality images, however, is only possible when there is excellent interaction between the physician, operator, and the mobile C-arm system. With the Veradius Unity, we have completely reinvented the mobile C-arm experience so you can experience a new level of efficient teamwork in surgical imaging.

Key advantages

· Transform workflow during your surgical procedures with tablet-like simplicity. The user interface is so easy, it scored in the top 10% for best system usability[1]

· Cut miscommunication in half during positioning through our patented ClearGuide and color coding on the C-arm[2]

· Increase confidence during complex vascular, cardiac, and orthopedic procedures with superb image quality achieved at excellent dose efficiency

1 Top 10% for best usability is based on an average score of 83.5 on the System Usability Scale by 15 users. See "A Practical Guide to the System Usability Scale: Background, Benchmarks, & Best Practices," by J. Sauro, 2011, Denver, CO, USA, Measuring Usability LLC.

2 Results obtained during user tests performed by an independent company. The tests involved 30 USA based clinicians (15 physicians teamed up with 15 nurses or X-ray technicians), who performed simulated procedures in a simulated OR environment. None of them had worked with a Philips C-arm or with each other before.

2. System overview

The Veradius Unity is a fully counterbalanced C-arm with a thin Flat Detector. The system is designed for easy operation with an intuitive, tablet-like touch screen user interface on the C-arm stand. It can be conveniently turned so the operator can easily access it wherever he stands. It has a compact footprint and rear-wheel steering for easy maneuverability and positioning. The intelligent design of the Mobile View Station provides the user with optimal viewing and connectivity capabilities.

1 Monitors
- The Mobile View Station has two 19" High Brightness Color LCD monitors and convenient touch screen user interface
- Maximum light output: 650 cd/m^2
- Contrast ratio: >700:1
- Flexible monitor positioning: step less height adjustment and 180° rotation so the monitors can be brought close to the physician
- Foldable for safe transport and storage

2 Archiving and documentation
- Fully integrated DICOM solution
- Medical DVD recorder (optional)
- Printer (optional)
- USB image storage

3 Connectivity
- Video-in to display external video signals like ultrasound or endoscopy
- Digital video-out to display Veradius Unity images on external operating room monitors without a loss of resolution
- Wireless LAN data transfer (optional)

4 High power X-ray tank
- 15 kW rotating anode power for demanding procedures
- Excellent heat management for lengthy interventional procedures with active oil cooling
- Monoblock architecture delivers sharp defined pulses to significantly reduce motion artifacts and reduce X-ray dose

5 Flat Detector
- Trixell amorphous silicon detector
- Field of view: 26.2 x 26.2 cm
- Easy to remove grid for imaging small anatomies with up to 60% less X-ray dose
- Integrated laser to accurately position the system without radiation
- Automatic calibration supports consistent high image quality

6 Stand monitor
- Intuitive touch screen to control all required settings
- Large clinical image (14.6 cm/5.7") provides better visual control for the operator
- Simply touch the screen to position the shutters and iris
- 15.3" LCD screen

7 Easy workflow
- Preset application-specific programs to make it easy to obtain high quality images at low X-ray dose
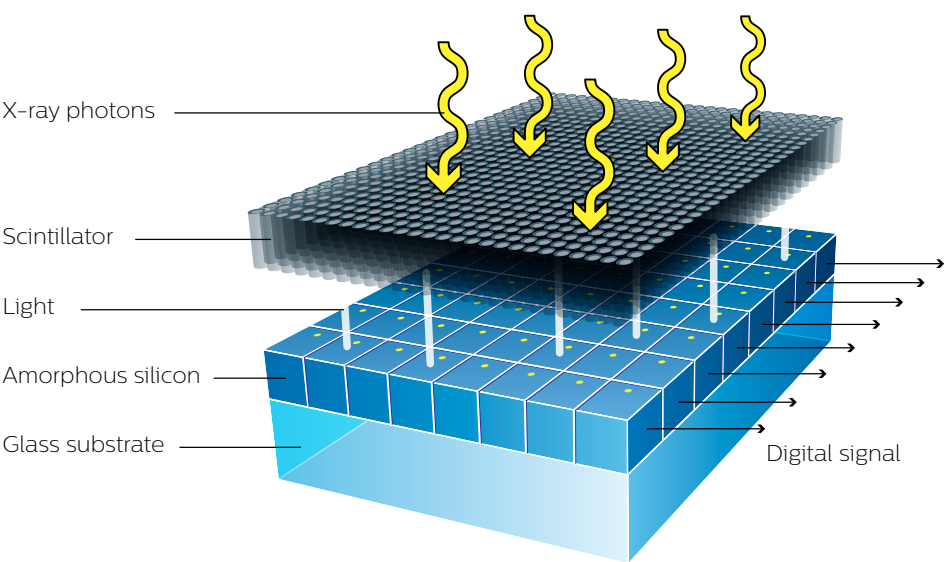
X-ray photons

Scintillator

Light

Amorphous silicon

Glass substrate

Digital signal

Fig. 1 Flat Detector principle

3. Flat Detector

Veradius Unity is already our third generation of Flat Detector systems, providing superb image quality to meet the needs of surgeons performing challenging procedures. Its advanced capabilities are the result of our long experience developing Flat Detector systems for cath labs. Surgeons can depend on superb, distortion-free image quality with a higher dynamic range than is possible with an image intensifier.

3.1 Flat Detector technology
The Cesium Iodide scintillator absorbs the X-ray photons and converts them into light. Photodiodes, each representing a pixel, absorb the light photons and convert them into an electronic charge. The charge of each pixel becomes a digital signal that is sent to an image processor.

The Trixell Flat Detector has the following features:
· Fast start-up time saves valuable time in the operating room
· Unique automatic background calibration of the Flat Detector allows consistently high image quality during the entire procedure
· 1560 x 1420 image matrix provides the highest resolution in a mobile C-arm
· Three selectable zoom sizes to better fit the region of interest

3.2 Flat Detector advantages
Flat Detector technology offers many advantages over traditional image intensifiers:
· The high dynamic range of the Flat Detector (96 dB) provides higher contrast images for demanding procedures. With the ability to differentiate a larger range of grey values than image intensifiers, the flat panel detector makes it possible to produce excellent images of soft tissue and skeletal structures at the same time
· Unlike image intensifiers, the Veradius Unity's Flat Detector produces images that are distortion free. The Flat Detector is not affected by geometrical or magnetic distortions

3.3 Removable grid
The grid from the Flat Detector can be easily removed by manually unscrewing four bolts. This allows superb image quality with great X-ray dose efficiency for imaging small anatomies.

| Specifications	
Flat Detector	Philips amorphous silicon detector
Scintillator	Cesium Iodide
Matrix	1560 x 1420 pixels
Field of view	26.2 x 26.2 cm (10.3" x 10.3") Zoom: 26.2/18.4/13.3 cm (10.3"/7.2"/5.2")
Pixel pitch	184 µm
Dynamic range	96 dB
A/D Conversion	16 bit
DQE (@ 0 lp/mm)	70%
MTF (@ 1 lp/mm)	59%
Lines /cm	70

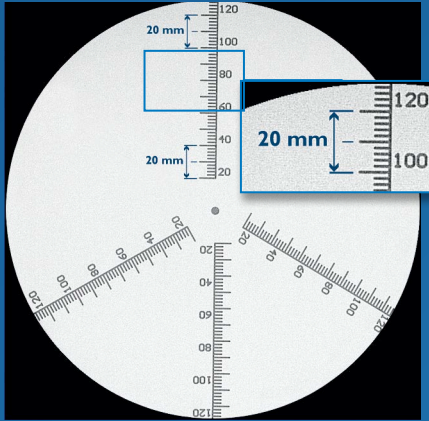| Feature	Specification
Calibration	Calibration every 5 minutes during idle state
Grid material	Carbon Fiber
Grid ratio	13:1
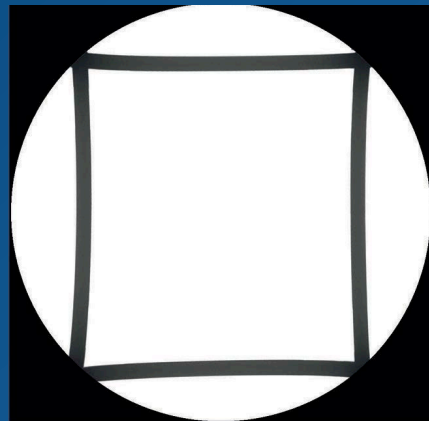
Typical image intensifier distortion of a square figure.
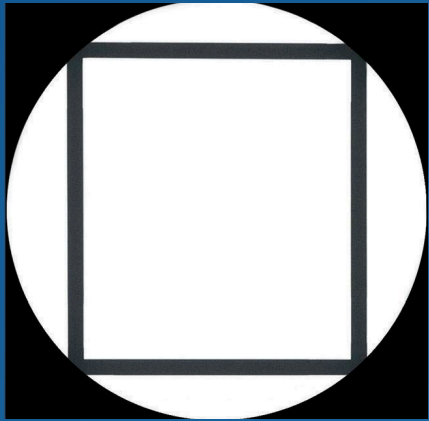
Flat Detector image with no geometric distortion.
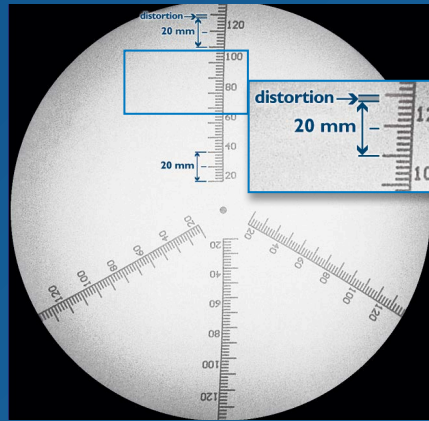
Measurements are less accurate at image intensifier edges due to distortions.


Distortion-free Flat Detector images allow accurate measurements throughout the field of view.

For imaging small anatomies, you can easily remove the grid.

4. Geometry

The unique shape of the C-arc provides an enhanced working area to easily access and image even obese patients, for example, for lumbar spine or hip procedures. It offers more space to comfortably perform your cases and to easily reposition the system, which may save you precious time.
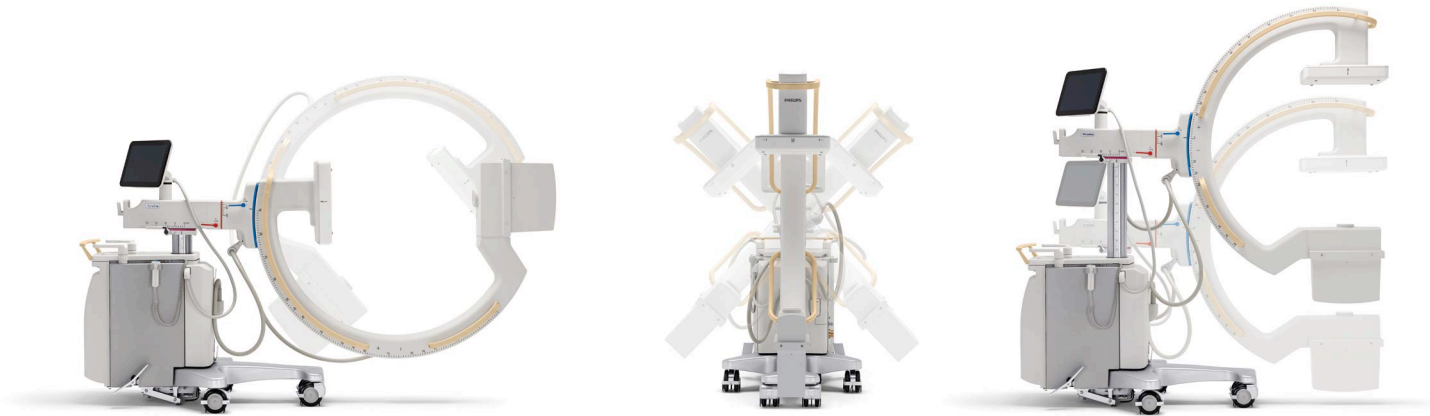
Veradius Unity system movements

Specifications

Angulation	140° rotation (+90°/-50°) offers a maximum of projection flexibility
Motorized height movement	490 mm/19.3"
Longitudinal movement	200 mm/7.9"
Panning movement (swivel)	± 10°
Rotation	± 200°
Lowest lateral position	102.7 cm/40.4"
Source to Image Distance (SID)	993 mm/39.1"
Free space in C-arm	772 mm/30.4"
C-arm depth	730 mm/29"
Parallel movement	Dedicated parallel movement with rear-wheel steering, for easy positioning along operating table
C-arm stand length	196 cm/77.2"
Weight	346 kg/757 lbs

The lowest lateral position allows for a comfortable working height

5. Imaging

The SmartVision technology combined with DoseWise offers you the possibility to produce exceptional high quality images and enhance the X-ray dose efficiency when possible.
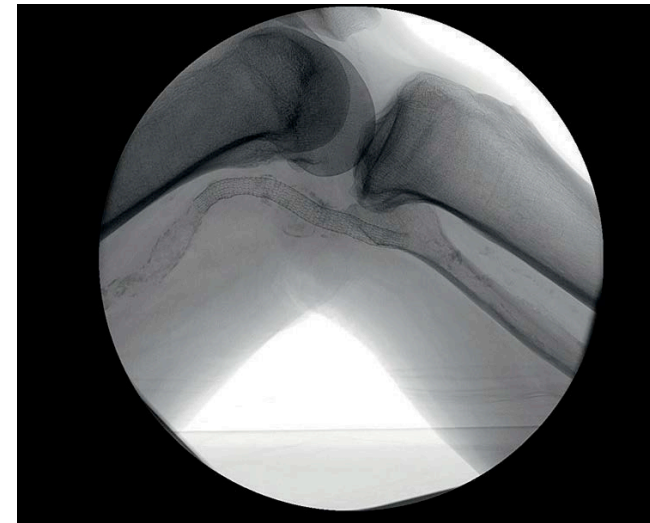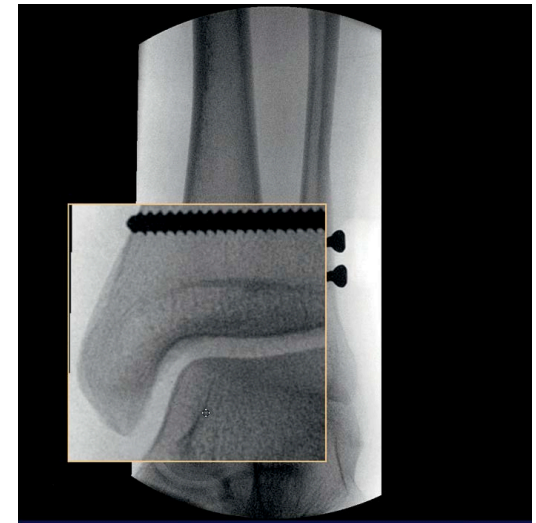

BodySmart automatically identifies the anatomy anywhere in the image and selects the optimum settings.

Digital zoom can be easily moved over the image. Measurements of lengths and angles can be made on the zoomed portion of the image

5.1 SmartVision
· Active matrix Flat Detector: 1560 x 1420 pixels, captures small details of the region of interest
· Unique BodySmart software allows free positioning of the anatomy, even at the edge of the image detector
· BodySmart detects anatomy and adjusts technique and image processing to produce optimal images
· Contrast and brightness can be adjusted automatically in real time or manually as desired
· Unique dynamic movement detection decreases motion artifacts. Millions of calculations are made every second to apply the appropriate level of noise reduction to every pixel in the image. Less noise reduction is applied to dynamic structures to significantly reduce motion artifacts. More integration is applied to static structures to produce crisp, noise-free images

5.2 DoseWise
· Philips beam filters reduce patient skin dose by up to 40%[3] by decreasing the amount of soft radiation that reaches the patient
· The grid on the Flat Detector can be easily removed to visualize small anatomy and extremities with outstanding image quality and radiation dose savings of up to 60%
· Imaging modes:
  – Fluoro modes ranging from Low X-ray dose to High Level, enabling dose savings when desired or improved image quality when necessary
  – Three different pulse rates for fluoro modes; the lower pulse rate can reduce X-ray dose
· Collimation:
  – Graphical shutter and iris and image orientation on Last Image Hold on C-arm stand touch screen without applying radiation
  – Real lead asymmetrical shutters
  – Independent shutter positioning
  – Automatic Electronic Blanking following the lead shutters and iris to improve image quality

· Automatic Shutter Positioning (ASP) sets shutters to the anatomy of interest for excellent image quality at the touch of a button
· The integrated laser lets staff position the C-arm accurately without using radiation
· Several features contribute to increased X-ray dose awareness, including dose reporting, dose display, and an alert when exceeding a pre-defined procedure dose level

5.3 Acquisition settings
Preset acquisition settings apply dedicated fluoroscopy settings to obtain superb image quality for the anatomy of interest at the lowest possible dose.

Within each program there are different X-ray modes available (depending on anatomy of interest):
· Low Dose Fluoroscopy
· Normal Fluoroscopy
· Increased Dose Fluoroscopy
· High Level Fluoroscopy
· Exposure run to produce high quality images of virtually every patient
· Single shot exposure, for extra-sharp, single snapshot images
· Blur reduction and noise reduction buttons to further adjust the level temporal noise reduction to the amount of movement in the region of interest

[3] Compared to conventional filtration of 3 millimeters aluminum found in conventional filtration as required by IEC 60601-2-43, 2010.

6. X-ray generation

The powerful pulsed technology and exceptional heat management capabilities of the Veradius Unity allow you to go the distance in long cardiovascular and interventional procedures. Its rotating anode technology and 15 kW generator give you the power to see through virtually any patient and to see fine details in the steep projections.

6.1 X-ray generator
Veradius Unity uses a monoblock architecture with the high tension transformer in the X-ray tank. With the monoblock there is no need to transmit pulses over high voltage cables, which can result in a ramping up and ramping down effect, due to the electrical impedance of the cables. Because the monoblock generator operates at high frequencies (80 kHz), it produces sharp pulses, which results in fewer motion artifacts in the image. This also allows less soft radiation to be used and produces less heat.

6.2 X-ray tube
Veradius Unity has a rotating anode and high power generator with excellent heat management to perform the most demanding interventional procedures.

Specifications
Tube type	Rotating anode X-ray tube
Nominal X-ray tube voltage	120 kV
Nominal focal spot values	0.3 and 0.6 mm
Maximum anode heat content	315 kHU
Maximum heat dissipation	73 kHU/min
Cooling method	Active oil-circulation cooling
Inherent filter	1.0 mm Al. equivalent
Integrated beam filter	3.0 mm Al. +0.1 mm Cu
Total beam filtration	6.75 mm Al. eq.

Operating values with Pulsed fluoroscopy
kV range	40–120 kV
mA peak range	1–60 mA
Pulse width	5.6 – 44 ms
Pulse rate	4 - 8 - 15 – optional 30

Operating values with Exposure runs
kV range	40–120 kV
mA peak range	1–60 mA
Pulse width	9.3 – 178 ms
Pulse rate	4 - 8 - 15 – optional 1-2-30

Operating values with Single shot exposure (snapshot)
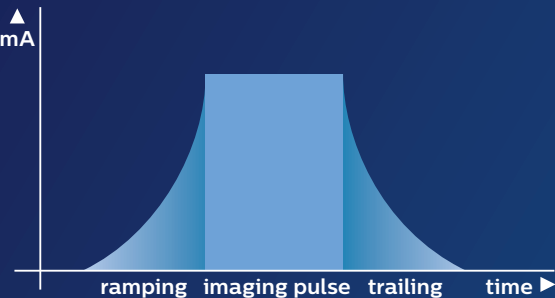|	
kV range	40–120 kV
mA peak range	2–125 mA
Time range	100 and 165 ms

6.3 X-ray collimation
Collimation reduces scatter radiation and enhances image quality. The Veradius Unity makes collimation easy. Its full lead shutters can be rotated and moved independently, and the unique Philips Automatic Shutter Positioning (ASP) feature automatically positions shutters for optimal image quality at the touch of a button. You can position shutters or adjust the iris on the last X-ray image (Last Image Hold), enabling the shutters or iris to be positioned without the need for live fluoroscopy.

5.4 Real-time processing functions

Feature
360° digital rotation mirror left/right and up/down without radiation
(Automatic) contrast and brightness
Dynamic noise reduction (Adaptive temporal recursive noise reduction)
Adaptive 2D edge enhancement
White compression
Image disk storage: 2,000 / 10,000 / 20,000

5.5 Post-processing functions

Feature
360° digital rotation mirror left/right and up/down without radiation
Contrast and Brightness
Annotation (for a single image or all images in an examination)
Video invert (negative)
Zoom and roam (factor 2x real-time magnification, freely movable to any section of an image)
Measurement (to precisely quantify lengths and angles in images)
Electronic shutters (to block out over exposed areas outside the region of interest)

5.6 Mobile View Station monitors

Specifications
Resolution	1280 x 1024 pixels
Maximum light output	650 cd/m²
Minimal Contrast Ratio	1/400
Contrast ratio	>700:1
Viewing angle	170° in horizontal and vertical direction
Touch screen	Offers easy access to post-processing of acquired images, patient demographics as well as PACS (left monitor)
Monitors	Two 19" High Brightness Color LCD monitors for diagnostic image quality display

Monoblock — mA / imaging pulse / time

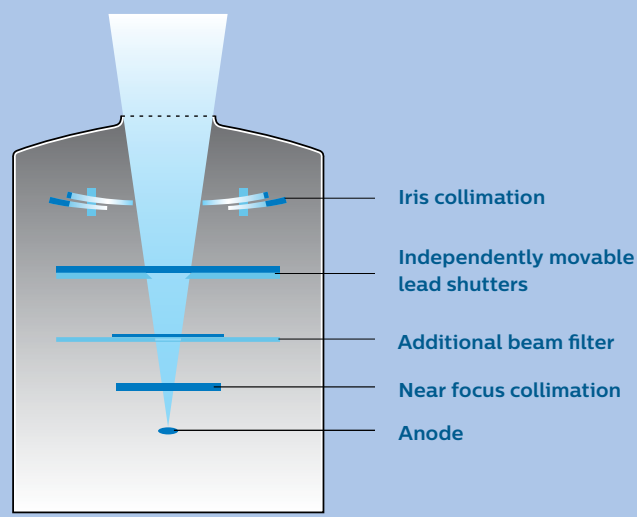**Without monoblock** — mA / ramping / imaging pulse / trailing / time

The Veradius Unity monoblock generator produces sharper pulses for crisp images, less heat and low X-ray dose

With the touch of your finger, Automatic Shutter Positioning places shutters in the optimal position.

Specifications

Specifications	
Shutters	Two independent lead shutters with steel wedge: shutters can be coupled for rotation and translation, or moved individually for asymmetric collimation
Automatic Shutter Positioning	Automatic shutter placement based on image content
Shutter material	3 mm Pb
Wedge material	0.2 to 2.5 mm stainless steel
Adjustment	Stepless
Rotation	360°
Iris diameter	50–265 mm
Position indication	On screen and also on last image hold without radiation

- Iris collimation
- Independently movable lead shutters
- Additional beam filter
- Near focus collimation
- Anode

7. Workflow

Veradius Unity combines intelligent, ergonomic design with unique positioning support and workflow-enhancing features.
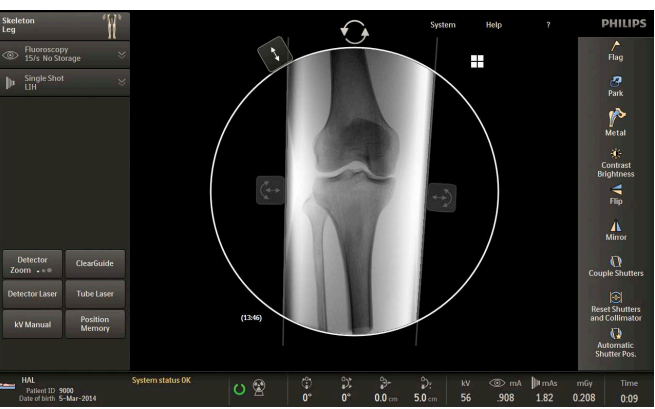
Shutters and iris can be dragged into position on Last Image Hold at the touch of a finger

7.1 Touch screen on C-arm stand
Physicians and operators experience a whole new level of simplicity with our tablet-like user interface on the C-arm and intelligent workflow. Now you can just touch the screen with a finger to drag the shutters and iris into position on Last Image Hold. At each step you only see the features you need, making it easy to find the right selections.

7.2 Positioning support
The positioning support features are designed to reduce the time and number of images for a surgical procedure, which can make procedures more pleasant for everyone.

ClearGuide and color coding
Our unique ClearGuide in combination with color coding on the C-arm speeds up positioning. ClearGuide provides a uniform reference for the operator and physician to use during positioning. A set of numbers (3, 6, 9, 12) on the Flat Detector corresponds to the same numbers displayed on the clinical image. The physician can say 'Rotate orange towards 3' and the operator knows exactly what to do. The numbers always match up, even if the image is rotated, flipped, or mirrored.

Position Memory (option)
Returning the C-arm to the exact position to check placement of a pedicle screw during spinal surgery can require additional scout images without extra positioning guidance. With Position Memory, you can store a previous position and recall it when needed to speed up re-positioning.

The same reference numbers are clearly visible on the clinical image and on the Flat Detector (ClearGuide) so everyone knows which direction is meant when positioning the C-arm.
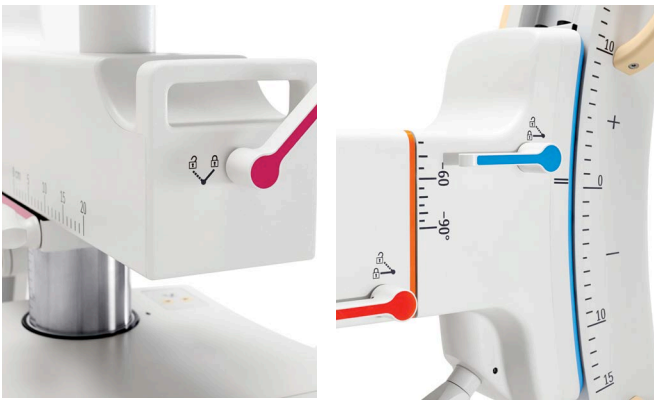
Each movement of the system – angulation, rotation, height, horizontal – is color coded to simplify positioning.
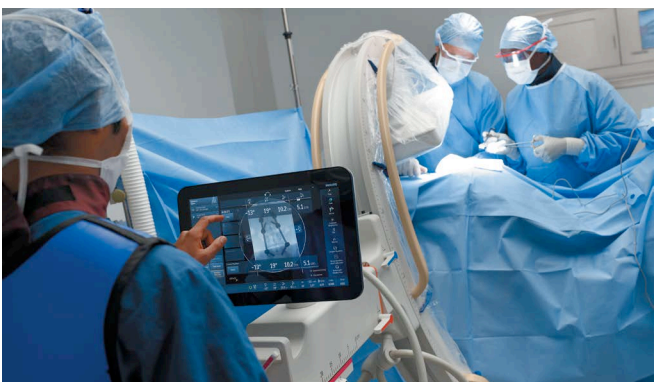
The touch screen on the Mobile View Station displays the stored position above the current position of the C-arm.

**For an optimal viewing angle, the LCD monitors can be rotated 180° and adjusted in height (23 cm/9")**

7.3 Mobile View Station
The compact Mobile View Station fits perfectly in the surgical workflow. Its intelligent design provides the user with easy system set-up, optimal viewing capabilities and easy transportation. Its unique design also makes it easy to clean.

All system controls are at your fingertips on the left monitor of the Mobile View Station. With this touch screen user interface, you can intuitively set up an exam, post-process images, or export

a case to PACS. The operator can easily see the clinical image on this 15" screen without obstructing the view of the physician. Because we use advanced infra-red technology, the touch screen monitor delivers the same image quality as non-touch screen monitors.

For easy and safe transport and storage, simply fold the monitors and move them to their lowest position.
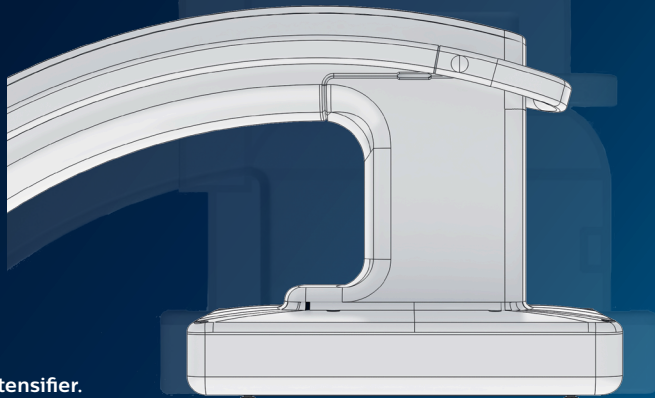
Size of super thin Flat Detector compared to traditional image intensifier.

7.4 Super thin Flat Detector
The super thin Flat Detector frees up valuable workspace around the patient during challenging procedures. It gives you more room to see your patient, to see team members, and to coordinate tasks.

7.5 Integrated laser
An integrated laser in the Flat Detector, can be activated and deactivated at the touch of a button, enabling accurate positioning of the C-arm without radiation.

7.6 Connectivity
· The Wireless Data Transfer option allows users to connect to the RIS/HIS to send and retrieve images or other relevant data wirelessly and reduce the amount of cable clutter in the OR
· Digital Video out to display left and right images on additional monitors (e.g. ceiling mounted) without a loss of resolution
· Video in allows you to conveniently display external video signals like endoscopy or ultrasound on the right C-arm monitor, so all the information needed is in one view
· USB storage provides a convenient way to store and images for use in reports or presentations

7.7 DICOM
DICOM is seamlessly integrated into the system for digital image to DICOM translation. A highly intuitive user interface simplifies use.
· DICOM print
· DICOM store
· Modality Worklist Management (MWL)

· Modality Performed Procedure Steps (MPPS)
· Storage Commit
· DICOM Storage to DVD (optional)
· DICOM query/retrieve (optional)
· DICOM Structured Dose Reporting

DICOM image formats:
· Secondary Capture (SC) with/without text and X-ray
· Angiography (XA – multi frame)
· DICOM Radiation Dose Structured Report

7.8 Integrated Healthcare Enterprise (IHE)
The Veradius Unity is compliant with the IHE Scheduled Workflow Integration Profile as an Acquisition Modality Actor.

Feature	Specification
Digital Video out	2 DVI connectors left and right monitor
Video out	S-Video
Video in	S-Video
USB storage	BMP format
Integrated laser	635 nm Maximum output < 5 m W Laser class 1M (IEC)

Communications	Wireless LAN
IP Addressing	Static IP, DHCP (optional)
Wireless Standards supported	IEEE 802.11a/b/g
Number of antennas	2 external
User configurable SSID support	Up to 16 SSIDs, each with a unique MAC address and configurable SSID Broadcast
Number of Roaming Points supported	16
Authentication protocols	IEEE802.1x EAP-SIM, EAP-TLS, EAP-TTLS, EAP-FAST and PEAP (With choice of AES, TKIP and WEP encryption)
Security	IEEE802.11i WPA2, WPA with AES or TKIP encryption

8. Clinical extensions

The Veradius Unity is a versatile imaging system that can support a wide variety of clinical applications, and a number of application-specific extensions are available to adapt the system to your specific needs.

8.1 Outlining
The outlining tool allows users to draw an outline digitally on an image on the touch screen using a stylus pen, for example, to mark a bifurcation or side branches on live fluoroscopy images. Drawings can be switched/toggled on and off. The undo button corrects mistakes and the delete function gets rid of the drawing with the touch of a button.


Optional

8.2 Pain extension
The pain extension offers digital subtraction functionality to enable enhanced visualization of contrast medium injections. Pain interventionalists can work with confidence to avoid potentially dangerous intravascular injections when they use digital subtraction to enhance visualization of contrast distribution.
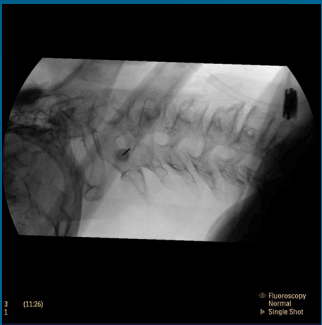
Lateral Cervical Spine – Localization in Pain Management

8.3 Cardiac extension
This combination of dedicated cardiac exam types, high pulse rates and expanded image memory is the ideal package for cardiac interventions. The cardiac extension includes dedicated anatomical programmed fluoroscopy parameters for electrophysiology procedures, pacemaker placements, and cardiac surgery. With motion-stopping pulses of up to 30 pulses per second and 60 mA, Veradius Unity captures sharp images of fast moving anatomy in the region of interest. Larger memory (20,000 images) provides capacity to record long cases at high frame rates.
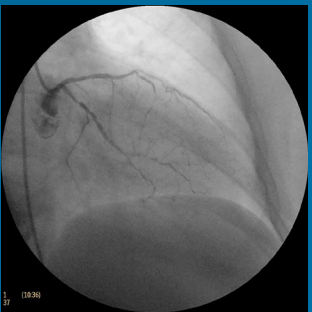
**Coronary angiogram**

8.4 Vascular extension
The vascular extension offers you the full support for vascular cases, providing an extensive range of vascular imaging tools. Most vascular functions can be controlled by handheld remote or at the user interface on the Mobile View Station. Expanded memory (10,000 images) provides the additional capacity you need to record long cases.

Vascular Processing:
· Subtracted fluoroscopy mode displays images in subtracted mode
· Trace mode shows in real time the maximum opacification of the vessels
· Roadmap images support catheter guidance
· Remask lets you reselect the most suitable image in your run as a mask image for contrast runs
· Smart Mask reduces dose and contrast medium usage by re-using previously acquired mask images for roadmapping
· Landmarking provides a non-subtracted background image for anatomical reference
· Real time pixel shift compensates for movement artifacts
· Subtraction on/off simplifies the orientation for subtracted images during roadmap procedures (controlled by remote control or User Interface on the Mobile View Station)
· View Trace creates a trace image in post-processing
· CO_2 mode for subtraction, trace white and roadmap with Smart Mask
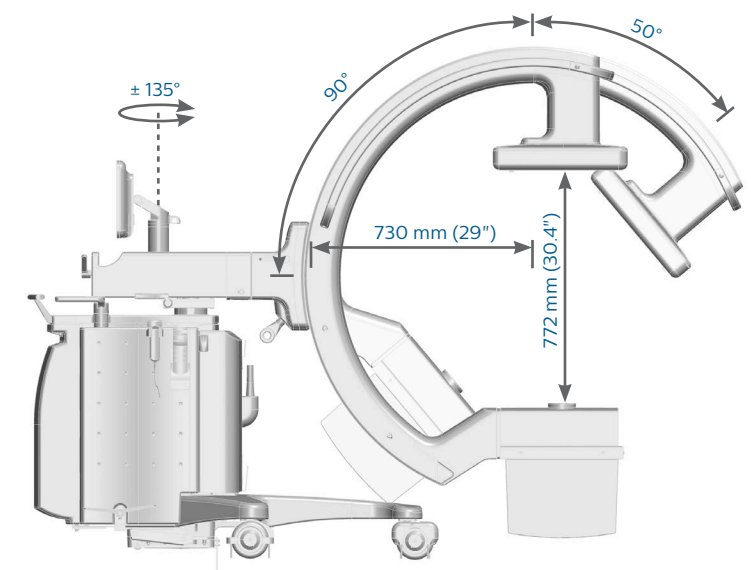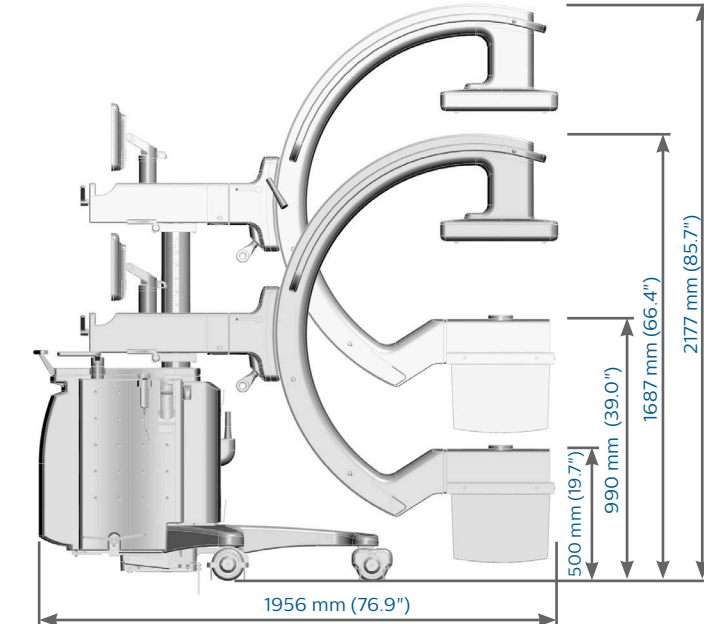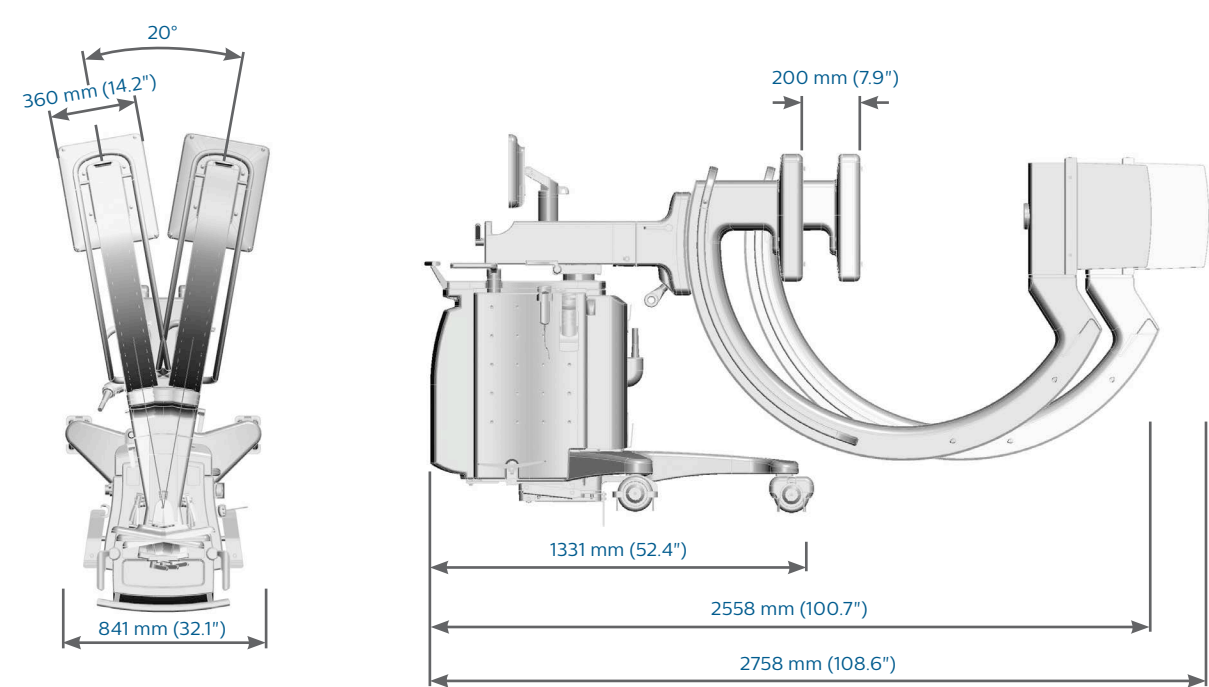

EVAR (EndoVascular Aneurysm Repair)
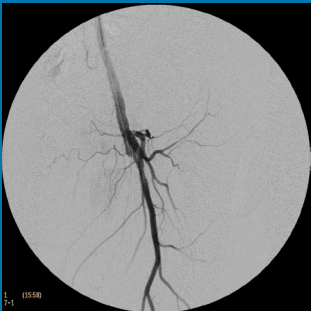
Vascular Subtraction of Peripheral Vascularity
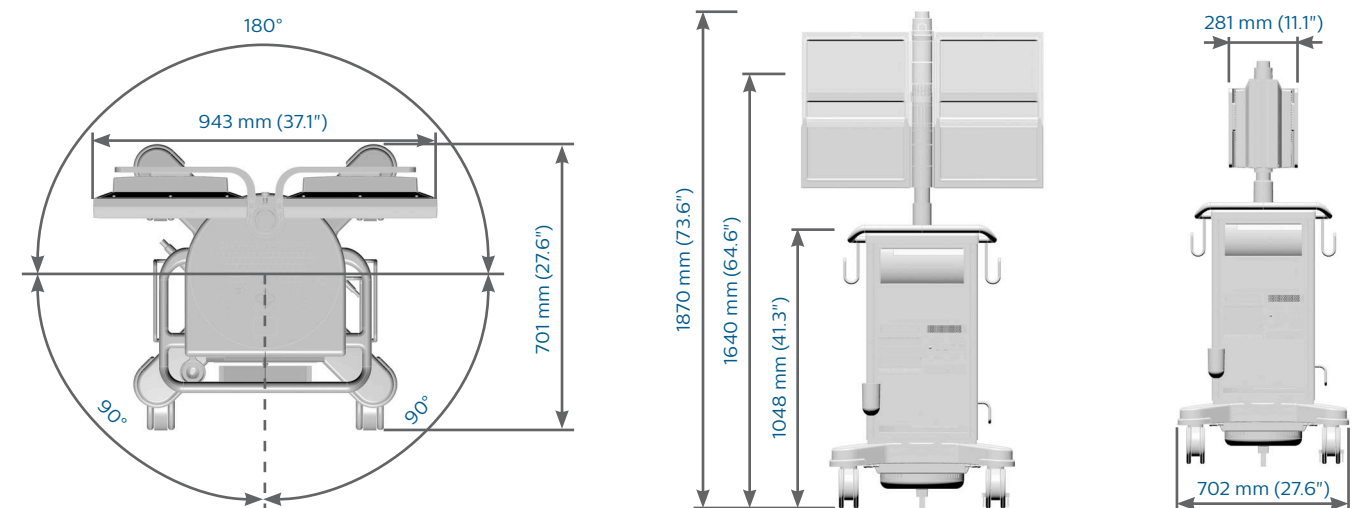
8.5 Cardiovascular extension
The cardiovascular extension provides high quality fluoroscopy, subtraction runs, and roadmap guidance to support challenging cardiac and vascular procedures. Vascular processing features include subtracted fluoroscopy mode, trace mode to show the maximum opacification of vessels in real time, and real-time pixel shift to compensate for movement artifacts. Extra support for cardiac examinations is provided with dedicated anatomically programmed fluoroscopy parameters for electrophysiology procedures, pacemaker placements, and cardiac surgery. With motion-stopping pulses of up to 30 pulses per second and 60 mA, Veradius Unity captures sharp images of fast moving anatomy in the region of interest.

9. Dimensions

9.1 C-arm stand

20°
360 mm (14.2")
200 mm (7.9")
1331 mm (52.4")
2558 mm (100.7")
2758 mm (108.6")
841 mm (32.1")

2177 mm (85.7")
1687 mm (66.4")
990 mm (39.0")
500 mm (19.7")
1956 mm (76.9")

± 135°
90°
50°
730 mm (29")
772 mm (30.4")

9.2 Mobile View Station

180°
943 mm (37.1")
701 mm (27.6")
90°
90°
1870 mm (73.6")
1640 mm (64.6")
1048 mm (41.3")
281 mm (11.1")
702 mm (27.6")

10. Options

Position Tracking and Position Memory	With Position Memory, you can store up to four positions (angulation, rotation, horizontal position and C-arm height) and recall them later on the screen when needed to speed up re-positioning. The system displays both the current position and the saved position on the C-arm stand monitor which guides the operator back to the exact projection required. Also it is possible to recall the position of every stored image.
Tank laser aiming device (in addition to standard laser on Flat Detector)	Optional laser projects a crosshair from the X-ray tank towards the Flat Detector, indicating the center of the X-ray beam and enabling alignment of the C-arm without X-ray.
Medical DVD Recorder	The Medical DVD Recorder allows recording of static and dynamic live fluoroscopy on a DVD (up to two hours).
Video Paper printer	Thermal printer to print video images from the live (left) monitor on to paper during or after examinations. Print 1, 2, 4, or 6 images on one page in landscape or portrait format. Sony UP-97xAD printer.
Video Paper/transparency printer	Thermal printer to print video images from the live (left) monitor on to paper or transparencies during or after examinations. Print 1, 2, 4, or 6 images on one page in landscape or portrait format. Sony UP-99xAD printer.
Built-in multi modality workstation (ViewForum)	Offers an intuitive multi-purpose platform for retrieving and handling images from different modalities. It lets you compare pre-operative images side-by-side with the live fluoroscopy images. 500 Gbyte hard disk.
ViewForum options	· MIP/MPR - maximum intensity projection singles out high intensity areas for optimized 2D projection of a 3D volume · DVD DICOM Store - record DICOM images onto a DVD
Wireless data transfer	The Wireless Data Transfer option allows users to connect to the RIS/HIS to send and retrieve images or other relevant data wirelessly and reduce the amount of cable clutter in the OR. Includes DHCP.

11. Service

Our global presence guarantees that no matter where you are, Philips is there for you. Whether you want to reduce your operational risk and equipment downtime, leverage your in-house service capabilities, or use your system more effectively. You choose the support that is the right fit for your facility. The resources, training, and support we offer, enable you to focus on what's most important — your patients. We provide a full lifecycle solution designed around your patients, your people, and your organization. We help you succeed in every phase of system ownership, from planning to start-up, through peak usage and renewal.

Planning
· Philips medical capital financing solutions
· System installation project management
· Room design services

Start-up
· Clinical application education
· In-house service training
· Online learning center

Peak Usage
· Comprehensive, partner and flexible service agreements
· Remote services
· Service information portal

Renewal
· Installed base programs
· System relocation services
· Refurbished systems

Remote proactive support
One valuable feature in our Service Agreements is remote proactive support. It helps you get the most from your imaging system and maintain its peak performance every day. Philips remote services is an advanced, secure network that links your Veradius Unity to our global remote services customer care centers. Services that formerly required on-site visits are now available by connecting to our remote experts.

Continuous system analysis allows our experts to detect anomalies before they impact equipment performance — protecting you against lengthy downtime and unexpected costs. If a deteriorating situation is detected, corrective action can be carried out quickly and effectively, often with no interruption to your busy schedule. A global platform for system communication certifies that all service data is handled via best-in-class encrypted transmission technology.

**Veradius Unity is not yet CE marked, and not yet available for delivery.
This document is not intended for the United States.**

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