

100227 Allura Xper FD20/15

System Type: New
Freight Terms: FOB Destination
Warranty Terms: Part numbers beginning with two (2) asterisks (**) are covered by a Per Contract. All other part numbers are third (3rd) party items.
Special Notations: Contingencies must be removed 120 days before scheduled shipment to assure delivery on specified date. Any rigging costs are the responsibility of the Purchaser.

Additional Terms:

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1	**NNAE848	AlluraClarity_FD20/15 Vascular	1
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The AlluraClarity FD20/15 biplane cardiovascular system comprises a floor mounted C-arm stand, a ceiling mounted double C-arm and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.

ClarityIQ technology is the foundation of AlluraClarity systems touching every part of the imaging system.

ClarityIQ incorporates powerful state-of-the-art image processing technology, developed by Philips research, all working in real-time enabled by the latest computing technology:

- Noise and artifact reduction, also on moving structures and objects
- Image enhancement and edge sharpening;
- Automatic real-time patient and accidental table motion correction on live images.
- Flexible digital imaging pipeline
- ClarityIQ systems have a flexible digital imaging pipeline from tube to display that is tailored for each and every application area such as Cardio or Neuro. This gives the flexibility to select virtually unlimited application-specific configurations.
- With ClarityIQ over 500 system parameters are fine-tuned for each application area; the result of years of Philips clinical leadership. It is now possible to filter out more X-ray radiation, use smaller focal spot sizes, shorter pulses, thereby fully utilizing the unique capabilities of the Philips MRC X-ray tube.

The AlluraClarity FD20/15 system uses an integrated single-host concept. The system is comprised of five functional building blocks: Geometry, X-ray Generation, Image Detection, Viewing, and User Interface. Each functional building block is explained in further detail including accessories.

GEOMETRY**The AlluraClarity Frontal Stand**

The Allura stand consists of a floor mounted C-arm. The stand has the following capability:

- The L-arm can be rotated allowing a three-sided patient approach.
 - L-arm rotation around the patient table: +90, 0, -90 degrees.
 - L-arm rotation movement: motorized and manual

The Allura stand allows a very wide range of projections, including PA and AP imaging.

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		<ul style="list-style-type: none"> In the head position (0 degrees position, L-arm parallel to patient table): <ul style="list-style-type: none"> C-arm rotation range (degrees): 120 LAO to 185 RAO C-arm angulation range (degrees): 90 CA to 90 CR (Full angulation capability determined by patient position) In the side position (+90 / -90 degrees position, L-arm perpendicular to patient table): <ul style="list-style-type: none"> C-arm rotation range (degrees): 90 LAO to 90 RAO C-arm angulation range (degrees): 185 CA to 120 CR or 120 CA to 185 CR (Full angulation capability determined by patient position) The stand provides fully motorized fast movements with variable and configurable maximum speed. <ul style="list-style-type: none"> Variable C-arm rotation speed, up to: 25 degrees per second Variable C-arm angulation speed, up to: 18 degrees per second L-arm rotation motorized and manual C-arm depth is 90 cm The FD20 Dynamic Flat Detector features Xper Access which allows the flat detector to be positioned in either portrait or landscape imaging modes in 3 seconds. The variable source image distance between focus and Dynamic Flat Detector input screen is motorized from 89.5 to 119.5 cm. The stand features BodyGuard a capacitive sensing collision avoidance system for patient protection. 	

The AlluraClarity Lateral Stand

The lateral stand consists of a double C-arm mounted to a ceiling suspended carriage.

The X-ray tube and the Flat Detector are integrated into the C-arm. The double C-arm concept enables mutual independent rotation and angulation movements. The FD15 Dynamic Flat Detector on the lateral stand is mounted at the right side of the patient, which provides lower scatter radiation towards the operator.

Ceiling carriage longitudinal movement: 315 cm

The lateral stand projection ranges:

- Rotation range (degrees): 27 RAO to 117 RAO
- Angulation range (degrees): 45 CA to 45 CR

The stand provides fully motorized movements. The rotation movement can be controlled separately or synchronously with the frontal stand. The Flat Detector is counterbalanced and can be moved motorized and manually.

- Rotation speed: 8 degrees per second, fixed
- Combined rotation speed (frontal / lateral): 8 degrees per second, fixed
- Angulation speed: 8 degrees per second, fixed
- Flat detector movement: motorized and manual
- Ceiling carriage longitudinal movement: motorized and manual

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- Motorized fine adjustment when the lateral stand is in the biplane application area.
- During combined rotation, the BodyGuard detection system of the frontal stand controls the rotation speed of the frontal and the lateral stand.

Patient support

The Xper Table

Patient support with flat carbon fiber tabletop

- Table top length of 319 cm, width 50 cm
- Metal-free overhang 125 cm
- Floating table-top movement of 120 cm longitudinal and 35 cm transversal range.
- Motorized height adjustment from 79 to 107 cm
- Maximum cantilever of 223 cm , for full patient coverage
- Maximum patient weight 250 kg with 25 kg of accessories plus 500 N for CPR in any longitudinal position of the table top
- Xper Geometry and Imaging Modules for exam room controls.
 - The operating modules can be attached to either side of the table.

Patient Support Accessories set

- One cerebral filter
- Three rail accessory clamps
- One IV stand
- One slow recovery foam mattress
- One Set of Arm Supports (FCV0248)
- One Set of Patient Straps (FCV0250)
- One Head Support (FCV0251)
- One Arm Support (FCV0258)
- One Table-mounted Radiation Shield
- One anti-fatigue mat with Philips logo

X-RAY GENERATION

The AlluraClarity FD20/15 utilizes a microprocessor controlled high frequency 100 kW generator. The user interface control of this X-ray Generator is incorporated in the Xper module, Xper Desktop Console, and the Xper on-screen displays.

For each plane, the Certeray generator comprises:

- X-ray generator: 100 kW
- Voltage range: 40 - 125 kV
- Program selection:
 - Pulsed X-ray up to 3.75 , 7.5 , 15 , 30, frames/s for digital dynamic exposures
 - Pulsed X-ray for pulsed fluoroscopy (3.75, 7.5, 15, 25, 30 frames/s).

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- Minimum exposure time of 1ms.
- ECG triggered acquisition: allows acquiring one exposure for each QRS peak with selectable delay time
- Automatic kV and mA control for optimal image quality prior to run to save dose
- Optimal X-ray tube load incorporated in the Certeray generator
- An X-ray collimator with single semi-transparent wedged filter with manual and automatic positioning.
- SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with the MRC-GS 0508 X-ray tube.
- Xper Beam Shaping, which means that, both shutters and wedges can be positioned on the Last Image Hold without the need for X-ray radiation.

Fluoroscopy

- Three programmable fluoroscopy modes
 - Each mode can be set to different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, and adaptive harmonization).
- Roadmap Pro (Formerly Trace Subtract Fluoroscopy)
 - A Roadmap Pro run is a vessel map an acquisition superimposed on live fluoroscopy
 - Acquisitions can be performed without losing the vessel map
 - Roadmap Pro features Smart Settings in special clinical modes that are optimized to visualize special materials such as coil and glue.
 - Automatic Motion Compensation (AMC) part of the roadmapping functionality. During roadmapping, small patient movements can lead to subtraction artifacts. These artifacts might conceal important clinical information. Automatic Motion Compensation compensates for rigid, uniform (skeletal/table) translations and is therefore very effective in interventional applications where subtraction imaging is used.
 - **Disclaimer:** AMC only corrects movement artifacts in two dimensions. Three dimensional movements such as swallowing or rotation of the head cannot be corrected.
- Xres for vascular is a standard feature of Roadmap Pro
 - Xres is a multi-resolution spatial temporal noise reduction and edge enhancement filter
 - Xres Vascular enhances sharpness, contrast, and reduces noise in non subtracted fluoroscopy runs for vascular studies.
 - The settings for Xres can be customized with regard to the image quality.
- Xper Fluoro Storage, a grab function allows storage and archiving of both a fluoro image and the last 20 seconds of Fluoroscopy, called Xper Fluoro Storage. These fluoro images or fluoro runs can be archived as a regular exposure run.

X-ray tube

The AlluraClarity FD20 biplane frontal stand has the Maximus ROTALIX Ceramic grid switch tube assembly MRC 200 GS 0407 integrated in the C-arc. This MRC tube has an anode heat storage capacity of 2.4 MHU and 0.4/0.7 mm. nominal focal spot values. The tube has a maximal loading of 30 and 67 kW.

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The lateral arc has the Maximus ROTALIX Ceramic tube assembly MRC-GS 05 08 integrated. This tube has 0.5/0.8 mm nominal focal spot values with maximal loading of 45 and 85 kW. The maximum heat dissipation of the assembly is 3400 W.

With dynamic pulsed fluoroscopy the tube uses grid switching technology to eliminate soft radiation and improve image quality. SpectraBeam allows for filtration of the x-ray beam with (a combination of) 0.2, 0.5 or 1 mm CU-equivalent filters.

Tube housing ROT-GS 1004 is for oil-cooling and has a build-in thermal safety switch. A rotor control unit is build-in for continuous rotation of the anode disk. The heat exchanger CU 3101 is for direct and continuous forced cooling with oil.

IMAGE DETECTION

Frontal imaging chain:

- A 30 cm by 40 cm FD20 Dynamic Flat Detector subsystem for fluoroscopy and fluorography procedures
- 8 imaging modes are available, 30 x 38, 30 x 30, 26 x 26, 22 x 22, 19 x 19, 16 x 16, 13.5 x 13.5, and 11 x 11 cm
- The flat detector subsystem features Xper Access, the detector can be rotated over 90 degrees, it moves from portrait to landscape back and forth
- The digital output of the FD20 flat detector is a 2k x 2.5k image matrix at 16 bits depth for the largest mode
- DQE (Detective Quantum Efficiency) >77%
- The pixel pitch is 154 x 154 microns
- Advanced Conductive Cooling technology

Lateral imaging chain:

- A 26 cm x 33 cm Dynamic Flat Detector subsystem for fluoroscopy and fluorography procedures
- Seven imaging modes are available; 29x26cm, 26x26cm, 22x22cm, 19x19cm, 16x16cm, 13.5x13.5cm, 11x11cm
- The digital output of the FD15 flat detector is a 1560 x 1420 image matrix at 16 bits depth
- DQE (Detective Quantum Efficiency) is 70 %
- The pixel pitch is 184 x 184 microns
- Advanced Conductive Cooling technology

Real time digital link

The AlluraClarity FD20/15 provides a Real Time digital image link

VIEWING

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The AlluraClarity FD20/15 comprises the following components in order to display the clinical images in the control and examination rooms.

Displays

Examination Room

Four 19-inch monochrome LCD monitors designed for medical applications. There are two live display monitors, one per plane and two reference monitors, one per plane.

- 19-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These monitors are not delivered when FlexVision XL, EP Cockpit or EP Cockpit XL is selected.

Unless otherwise stated, a Flat Monitor Ceiling Suspension (MCS) for 4 monitors is included for viewing in the examination room. It includes motorized height adjustment for most configurations and ceiling heights. At customer request, this 4 monitor MCS can be replaced by a 4, 6 or 8 fold MCS or an MCS integration kit for non-Philips MCS. The MCS integration kit contains vital parts for system operation. When FlexVision XL, EP Cockpit or EP Cockpit XL is selected the monitor ceiling suspension is configured for one of those options.

- The first reference channel is for the display of reference images or runs, controlled by infrared remote-control Xper Viewpad.
- The On-Screen Display provides status information on stand rotation, angulation, display of system messages, X-ray tube load status, selected fluoroscopy mode, selected detector Field of View, and both the rate and accumulation of the dose area product and skin dose.

Control Room

One 19-inch color LCD monitor used as a data monitor.

- 19-inch color TFT-LCD display
- Native format 1280x1024 SXGA

Two 19-inch monochrome LCD monitor designed for medical applications.

- 19-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These control room monitors are not delivered when EP Cockpit or EP Cockpit XL is selected.

The Graphical User Interface on the monochrome monitor has the following features and functions:

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		<ul style="list-style-type: none">• Step through file, run, or images• File, and run overview• Contrast, brightness, and edge enhancement settings• Flagging of runs or images for transfer• Applying text annotation in images• Optional DICOM printing• Executing Quantitative Analysis Packages if available• Subtraction functionality• Zoom/pan functionality• Electronic shutters• Video invert• View trace, stacking of images• Landmarking	

Any Allura system built after Jan 1, 2017, will use and include Windows 7 (embedded standard).

Acquisition

The acquisition segment coordinates the parameters for automatic exposure control. The program is selected via the Xper module or Xper Desktop Console.

Exposure techniques:

- Serial imaging for DA and DSA with automatic exposure setting
- Single shot mode
- Acquisition frame rates:
 - 0.5 to 6 fps
 - 15 and 30 fps

This Allura offers a storage capacity of:

- 50,000 images per plane at matrix size of 1024 x 1024, 10 bit
- Maximum number of examinations is 999, with no limit to the maximum number of images per examination

USER INTERFACE

Xper is comprised of three elements: 1) Xper Settings, to customize the system to each user's preferred settings, 2) Xper User Interface, and, 3) Xper Integration, making advanced integration functionality available, such as DICOM Query / Retrieve, background archiving, and Xper Fluoro Storage.

The Xper User Interface comprises a range of User Interface modules in the Examination Room, including On-Screen Display.

On-Screen Display

The On-Screen Display is positioned on the left side of each reference monitor.

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The following system information is displayed:

- X-ray indicator
- X-ray tube temperature condition
- Gantry position in rotation and angulation
- Source Image Distance
- Detector field size display
- General System messages (frontal reference monitor only)
- Selected Frame speed (frontal reference monitor only)
- Fluoroscopy mode (frontal reference monitor only)
- Integrated fluoroscopy time (frontal reference monitor only)
- Skin Dose: dose rate at X-ray, cumulated dose at no X-ray (frontal reference monitor only)
- Dose Area Product: dose rate at X-ray, cumulated dose at no X-ray (frontal reference monitor only)
- Graphical bars for Body Zone specific dose-rate and accumulated skin dose levels, related to the 2 Gy level (cardiac applications only)
- Stopwatch (frontal reference monitor only)

The Xper ViewPad contains the preprogrammed function settings. The system is provides with two Xper Viewpads. The following functions are provided:

- Run and image selection
- File and run cycle
- File overview
- Store to Reference image file
- Copy image to photo file
- Digital (fixed)zoom and panning
- Recall reference images
- Laser pointer, intended to point at regions of interest on the imaging monitors
 - LED indication of laser pointer on/off and battery low
- Subtraction on/off
- Remasking
- Landmarking

Remote Intercom

The separate intercom which is connected independently from the system that allows separate placement of the intercom at the preferred working position in the control room and examination room.

Table Side Modules

Two Xper Modules are provided for use. The first Xper Module is mounted tableside. The Second Xper Module (NCVA778) is located in the control room. These modules use a touch screen, which

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can be operated when draped with sterile covers. The Xper Module contains the following functionality:

- Acquisition settings
- Selection of Xper Setting allows the user to set frame rates and x-ray generation settings applicable for the type of the preferred intervention
- Automatic positioning recall to allow the stand position to match the reference image.
- Image Processing

The Xper Biplane Geometry T.S.O. module can be positioned at three sides of the patient table, while keeping the button operation intuitive. The Xper Geometry T.S.O. provides the following functionality:

- Tabletop float
- Table height position
- Source Image Distance selection per plane
- Gantry positioning per plane
- Biplane rotation of the two gantries
- Frontal gantry rotation in an axis perpendicular to the floor and longitudinal movement of the lateral gantry
- Store and recall of two scratch gantry positions including SID
- Emergency stop button
- Geometry reset button, which resets stand and table to a factory-default starting position

The Xper Biplane Imaging T.S.O. module can also be positioned at three sides of the patient table, while keeping the button operation intuitive. The Xper Imaging T.S.O. provides the following functionality:

- Fluoroscopy Flavor selection defined per Xper Setting
- Shutters and Wedge positioning
- Manual or automatic semi-transparent wedge filter
- Xper Fluoro Storage and Grab
- Selection of the Detector field size
- Shutter positioning
- Reset of the fluoroscopy buzzer
- Subtraction and other vascular processing factors
- Channel selection for the shutter and wedge control

Pan Handle (NCVA081)

The Pan Handle is an extension of the control facility for floating movements of the table

Control Room

The control room comprises a Xper Review Module, Xper Viewing Console, a keyboard, and a mouse. The Xper Review Module offers the basic functions for review. The Xper Review Module contains the following functionality:

- Power on/off
- Tagarno wheel to control the review of a patient file

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- File and run cycle
- Contrast, Brightness, and Edge enhancement settings
- File, Run, Image stepping and run and file overview
- Delete run
- Image invert and digital zoom
- Reset fluoroscopy timer and enable/disable X-ray

System information is displayed on the bottom of the data Monitor:

- Stopwatch and Time
- System guidance information
- Dose Area Product (DAP) and Skin Dose, as dose rate during X-ray, and accumulative dose
- Frame speed settings, fluoroscopy mode, and accumulated fluoroscopy time
- Exposure and fluoroscopy settings per plane, like Voltage (kV), Current (mA) and time (ms)
- Geometry information per plane, like rotation, angulation, and SID

Vascular Quantification Software Package (NCVA786)

- Vessel diameter / stenotic index
- Automated vessel analysis
- Calibration routines

The workflow is divided into scheduling, preparation, acquisition, review, and archive.

Scheduling

The patients can be added, listed and selected per date, physician, or intervention type. Previous DICOM patient studies can be uploaded with the DICOM Query Retrieve function.

Patient management protocols are flexible and allow for multiple studies to be selected under one patient identification number. This means that new studies can be appended to an earlier patient file. Each study can contain multiple examinations to allow for split administrative purposes. Each examination contains multiple files, like acquisition file, reference file, and QA results file.

Preparation

The preparation page provides the information of the room and patient preparation of each individual physician. The preparation page is customizable per Xper Setting and allows each physician to provide his or her own room protocols

Acquisition

The acquisition page contains information on the current selected patient.

Review

The review page allows for reviewing of patients:

- Previous examination cases
- Review of other DICOM XA or DICOM SC studies

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Vascular Quantification Software Package

Functions:

- vessel diameter / stenotic index
- automated vessel analysis
- calibration routines

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

RIS/CIS DICOM Interface

This package allows communication of the Allura Xper system with a local information system (CIS or RIS). The interface uses the DICOM Worklist Management (DICOM WLM) and Modality Performed Procedure Step (DICOM MPPS) standards.

If a hospital has an Allura Xper system and an information system it can receive patient and examination request information from the information system and report examination results in order to:

- Eliminate the need for retyping patient information on the Allura Xper
- Prevent errors in typing patient names and registration numbers (ensuring consistency with IS information to prevent problems in archive clusters auto-search for a name in case of later retrieval)
- Inform the IS about the acquired images and radiation dose

Upon request from the Allura Xper system the complete worklist with all relevant patient and examination data is returned from the IS to the Allura Xper system. For each patient the following information will be shown on the Allura Xper after it has been retrieved from the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number
- Scheduled procedure step start time
- Scheduled performing physician's name

It is possible at all times to enter patient demographics information manually within the Allura Xper system in case of an emergency or in case the local Information System connection is down.

On request of the clinical user the Allura Xper will report the following information about the selected patient to the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date

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- Sex

Examination/Request Information:

- Accession number
- Performed procedure step status start/end date and time
- Performing physician's name
- Referenced image sequence

Radiation dose:

- Total time of fluoroscopy
- Accumulated fluoroscopy dose
- Accumulated exposure dose
- Total dose
- Total number of exposures
- Total number of frames

Further detailed information can be found in the Allura Xper DICOM Conformance Statement.

The interface requires an EasyLink (hardware and software) if the IS is not compliant with DICOM Work List Management and Modality Performed Procedure Step.

Radiation Dose Structured Report

Collection of dose relevant parameters and settings and export to a DICOM database (e.g. PACS, RIS), according IEC60601-2-43, 2nd Edition.

The reported data can be used for, for example:

- Quality improvement: evaluating trends in X-ray dose performance per facility, system and operator.
- RDSR enables analysis of average dose levels & variance for routinely performed exams and procedures.
- Typical system usage can be extracted from the data.

Secondary Capture Dose Report

- The Secondary Capture Dose Report function allows the user to save & transfer, manually or automatically, a patient Dose Report to PACS in DICOM secondary capture format.
- The dose report will be stored in the related patient image folder.

Archive

Biplane Continuous Autopush (NCVA587)

Continuous Autopush is an archive accelerator, which ensures that background archiving continues with minimal disruptions.

Clinical studies can be archived to a CD or a PACS. The archive process can be completely automated and customized with Xper Settings. Parameters like multiple destinations; archive formats can be selected to the individual needs.

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The Xper DICOM Image Interface enables the export of clinical images to PACS. The export formats are based on DICOM 3.0 protocols. The system exports clinical studies in Cardiac DICOM XA Multi-Frame or DICOM Secondary Capture formats.

- The export format is configurable in 512x512, 1024x1024 or 2048 x 2048 (unprocessed) matrix.
- The examination can be sent to multiple destinations for archiving and reviewing purposes.
- The Xper DICOM Image Interface provides DICOM Storage and DICOM Storage Commitment Services.
- The DICOM Query/Retrieve function allows older DICOM XA MF and DICOM SC studies to be uploaded in the system. Furthermore, additional information can be appended to a study, while keeping the patient identification the same.

Real Time Digital Link

The AlluraClarity FD20/15 includes Real Time Digital Link which enables real time image transfer to the optional Interventional Hardware.

If Philips begins commercially selling a core system that it identifies as the direct successor for the core system ordered in this quote, and that system is not yet in production, then Customer may convert the ordered core system to the identified successor system. To communicate this option to Customer, Philips shall present a revised quote for Customer approval, which quotation will include the successor system, substantially similar feature configurations and options as the ordered system, and no change to the system's price. If Customer wants to change the configuration or options on the successor system, then Philips will adjust the quoted price of the successor system. To exercise this option, Customer must approve the revised quote prior to production beginning on the ordered system and prior to the deadline provided by Philips at the time of re-quoting. If customer does not approve the revised quote during this period, then Customer will be deemed to have declined the option and this system quotation will continue to apply.

Clinical Education Program for the AlluraClarity System

Essentials OffSite Education: Philips will provide up to two (2) Cardiovascular Technologists, Registered Technologists Registered Nurses, or other system operator as selected by customer, with in-depth didactic, tutorial, and hands-on training covering basic functionality and work-flow of the cardiovascular imaging system. In order to provide trainees with the ability to apply all fundamental functioning on their system, and to achieve maximum effectiveness, this class should be attended no earlier than two weeks prior to system installation.

In the event that an EP Navigator workstation has also been ordered, the offsite training course will be tailored to focus on the electrophysiology functionality of the FD system and the EPN workstation.

In the event that your main FD system will be dedicated to Cardiac applications your offsite training course will be tailored to focus on the Cardiac functionality.

This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration and availability. Due to program updates, the number of class hours is subject to change without notice. Customer will be notified of current, total class hours at the time of registration. This class is a prerequisite to your equipment handover OnSite Education. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. **Travel and lodging are not included, but may be**

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		<p>purchased through Philips. It is highly recommended that 989801292102 (CV Full Travel Pkg OffSite) is purchased with all OffSite courses.</p> <p>Handover OnSite Education: Philips Education Specialists will provide twenty-eight (28) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 28 hours, and must include the two OffSite education attendees. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. It is highly recommended for systems that are fully loaded or for customers with a large number of staff members to also purchase 989801292099 (CV Add OnSite Clin Educ 24h). Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 106107-110915</p>	
2	**NNAE853	FlexVision_XL 8 Input Package	1
		<p>The FlexVision XL8 input package provides eight isolated wall connection boxes.</p> <p>Isolated Wall Connection Box</p> <p>This Isolated Wall connection Box facilitates connection of the video source via standard DVI cable/connector and lossless transfer of the video signal over the approximate 30 m cable distance. It can be mounted in the exam room or in the control room, depending on the location of the video source.</p> <p>The quantity of the VWCB's has to be calculated as follows:</p> <p>For each video signal to FlexVision XL on Vascular System: 8 VWCB</p> <p>Note:</p> <p>No VWCB is required in case a video signal is connected directly to a dedicated LCD from the following sources:</p> <ol style="list-style-type: none"> 1) Xper Live/ref Slaving 2) Interventional HW (XtraVision), ViewForum, Xcelera (only if workstations are powered by Allura Xper) 3) Xper IM 	
3	**NCVB629	FlexVision XL,XperHD,Snapshot	1
		<p>FlexVision XL is an integrated viewing solution designed to give you full control over your viewing environment.</p> <p>The FlexVision XL provides the ability to:</p> <ul style="list-style-type: none"> • Display information from up to 8 sources simultaneously (incl. third party systems) on the Philips 58-inch color LCD with LED backlight in the Exam Room. • Resize and/or enlarge information at any stage during the case. • Select and customize viewing lay-outs of the Philips 58-inch color LCD via the Xper table-side module • Overview connected equipment (incl. third party systems) from a single location. <p>XperHD on FlexVision XL brings High Definition viewing for</p>	

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Line #	Part #	Description	Qty
		<p>clinical images. Native resolution of FD20 can be displayed. Excellent sharp and crisp clinical images can be displayed at full size without digital zoom.</p> <p>Xper HD brings:</p> <ul style="list-style-type: none">• High Definition imaging- Sharp images at full size without zoom• High Definition display at native resolution- Up to 2k*2k image display fully integrated• High Definition for the ultimate detail- Enhanced small vessel visualization <p>The FlexVision XL consists of:</p> <ul style="list-style-type: none">• DVI video composition unit.o The DVI video composition unit allows the user to direct and switch the video output of all connected medical equipment to specific sub windows of the Philips 58-inch color LCD with LED backlight in the Exam Room.o The DVI video composition unit is operated from the Xper tableside module.o The DVI video composition unit supports a wide variety of display formats (up to 1920x1200)o Up to 9 external inputs are connected to the DVI video composition unit via Wall Connection Box(es).• Medical grade, high resolution color LCD in the Exam Roomo This display supports the image quality requirements for monochrome X-ray images as well as color images and replaces all displays normally delivered with an Allura Xper FD or AlluraClarity system for the Exam Room.o Main characteristics are:- 58-inch, 8 Megapixel color LCD- Native resolution: 3840x2160- Brightness: Max: 700 Cd/m2 (typical) stabilized: 400 Cd/m2- Contrast ratio: 4000:1 (typical)- Wide viewing angle (approx. 176 degrees)- Constant brightness stabilization control- Lookup tables for gray-scale, color and DICOM transfer function- Full protective screen Ingress Protection: IP-21• Large color LCD control (Xper Module)o Resize and/or enlarge information at any stage during the case via the Xper tableside module in the Exam or Control Roomo Select viewing lay-outs via the Xper table-side module in the Exam Roomo Create new layouts by matching inputs to desired locations on preset templates. <p>• Monitor Ceiling Suspension</p> <ul style="list-style-type: none">o Monitor ceiling suspension for use in the Exam Room carries the 58-inch color LCD screen, providing highly flexible viewing capabilities. The monitor ceiling suspension is height-adjustable and moveable along ceiling rails. It can be positioned on either side of the table. <p>• Snapshot</p> <ul style="list-style-type: none">o The snapshot function allows the user to store/save a screen-capture of any image on the 58-inch display as a DICOM Secondary Capture image to a connected PACS. The snapshot-all function allows the user to store/save a screen-capture for each displayed image in the Exam Room / Control Room as separate DICOM Secondary Capture images .	

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Line #	Part #	Description	Qty
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4	**NCVB879	Aut Pos Contr Xper sys & table	1
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This Automatic Position Controller (APC) combines APC for Allura Xper FD10 and FD20 systems with table APC.

System APC provides two modes of operation:

Preset Position Sequence: the sequence of projections is determined through personalized Xper Settings. Each set contains a maximum of 10 positions. Positions can be recalled in sequence or directly. The projection sequence comprises rotation angulation and SID settings related to the selected reference image.

Reference driven positioning: The projections on the reference monitors can be recalled with the push of a button. The reference driven positioning recollects the C-arm rotation angulation Flat detector image format and SID.

Table APC

The Automatic Position Controller (APC) for the table provides two modes of operation:

Auto positioning. The tabletop position and table height will be adjusted automatically to the pre-defined default point of interest. This to save time and x-ray dose at the start of an exam or for setting up the system for rotation scans.

Store/recall of a position of the table top. This includes the height-, longitudinal- and lateral position of the table top.

5	**NCVB294	Set of 2 additional 21in. LCDs	1
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Two 21inch additional displays are located on top of the monitor ceiling suspension frame which carry the 56 inch large screen color LCD display.

These 2 additional LCD's can be used to display additional video sources or used as display back up for Hemo and Xray Live images. These LCD's have a fixed content.

Main characteristics of back-up displays are:

- 21.3 inch, 2 Megapixel color LCD display
- Max. resolution: 1600x1200
- Brightness: 450 Cd/m2
- Contrast ratio : 550:1
- Wide viewing angle (approx. 170 degrees)
- Constant brightness stabilization control
- Independently selectable brightness settings for monochrome and color images
- Independently selectable lookup table for gray-scale, color and DICOM transfer function

FCV0587, "XPer Live/Ref Slaving" required when displaying X-Ray Live as back-up.

6	**NCVA695	FD Rotational Angio	1
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Line #	Part #	Description	Qty
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Rotational angiography provides real-time 3D impressions of complex vasculature and coronary artery tree. It acquires multiple projections with just one contrast injection via a fast rotational scan of the region of interest.

Rotational Angiography can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image.

Compared with traditional angiography, Rotational Angiography can save considerable time, dose and contrast, while providing image detail required for diagnostic and therapeutic decisions.

A rotational scan is possible both with the Allura Xper systems in the side position (ceiling mounted systems) and in the head position, providing the flexibility to perform procedures virtually from head to toe.

C-arm in side position:

- Max. rotation Speed: 30 degrees/s
- Max. rotation Angle: 180 degrees

C-arm in head position:

- Max. rotation Speed: 55 degrees/s
- Max. rotation Angle: 305 degrees

Max. Frame speeds are given by the framespeed specifications of the system configuration.

The speed and range of rotation are the highest available (see table). The very high speed allows using less contrast, whereas the very wide rotation range provides a complete evaluation of the anatomy.

A contrast run can be followed up with a mask run, to allow image/run subtraction.

The stand is designed for a very high mechanical stability. It offers precise positioning and high reproducibility, assuring you of high quality images and excellent subtraction studies.

Operation of Rotational Angiography is extremely easy. The procedure is selected, set up and executed virtually in a matter of seconds, supporting the highest patient throughput.

A set of dedicated acquisition programs is available on the Xper Module and can be selected at the touch of a button. The rotation end- and start-positions are easily selected. The procedure is controlled from the exposure hand- or footswitch.

7	**NCVA694	Subtracted Bolus Chase	1
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For visualization of vessel structures when the blood flow is difficult to estimate, in particular in the lower peripherals.

Bolus Chase solves the problem of cumbersome step movements, the mismatch between blood flow and selected program, and lack of real-time image information.

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Line #	Part #	Description	Qty
		<p>During digital acquisition in non-subtracted mode with uninterrupted real-time image display, the contrast bolus is followed (chased) interactively by a motorized table scan movement using a hand-hold speedcontroller to adapt the speed of the table scan to the contrast flow. The framespeed can be adapted as well.</p> <p>The bolus run is followed with a mask run while using the same speedcurve and framespeed as generated during the bolus run. Viewing is possible in the subtracted and non-subtracted mode. If subtracted viewing is not required, the mask run can be skipped.</p> <p>Subtracted Bolus Chase gives fast, accurate results for increased patient throughput and improved patient management. Automated exposure control and precise speed control assure a high quality images and excellent subtraction studies.</p> <p>Comprising:</p> <ul style="list-style-type: none">• automatic exposure control• tabletop motordrive and hand-held speed controller (tableside)• technique selection using Xper module, available both tableside and in control room (Xper FD20, FD20/10)	
8	**NCVA258	CO2 View Trace Software	1
		Software package which enables tracing (stacking) of images acquired with CO2 injections. This function can be used during postprocessing next to view trace of images acquired with iodine injection.	
9	**NCVA621	Biplane FD Dual Fluoro	1
		<p>The Biplane Dual Fluoroscopy mode allows monoplane or biplane digitally processed fluoroscopy in parallel with trace subtract fluoroscopy, providing a non subtracted reference fluoro image for complex interventions.</p> <p>This option provides an additional biplane fluoro channel in parallel to the default biplane fluoro channel.</p> <p>The subtracted fluoro image will be displayed on the live monitor, the non-subtracted image is displayed on the reference monitor.</p> <p>Comprising:</p> <ul style="list-style-type: none">• Hardware and software	
10	**NCVC200	Wireless footswitch: bi-plane version	1
		<p>One wireless footswitch in the Examination Room.</p> <p>Key benefits</p> <ul style="list-style-type: none">• Reduces clutter around the examination table• Simplifies preparation and cleanup• Streamlines workflow in the interventional suite <p>Reduce clutter and streamline workflow</p> <p>The wireless footswitch option streamlines workflow, reduces clutter, and simplifies preparation and cleanup in the interventional suite. Clinicians can use the footswitch to wirelessly control the X-ray system in the examination room, from any convenient position around the table. No sterile covers are needed with the IPX8 certified waterproof design.</p> <p>Specifications</p> <ul style="list-style-type: none">• The bi-plane wireless footswitch is a 6 pedal version;	

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Line #	Part #	Description	Qty
		1. Bi-plane fluoro 2. Channel selection 3. Room light control/Single shot 4. Frontal fluoro 5. Exposure 6. Lateral fluoro. <ul style="list-style-type: none"> • The pedals can be configured according customers preferred lay-out. • The wireless footswitch is working via RF technology and is fully tested and released for medical use. It has an active range up to 10 meters, depending on structures within this range. • The wireless footswitch has a lithium battery which only needs to be recharged once per week. During recharging the footswitch still can be used and is fully functional. In parallel, a wired footswitch can also be used. • The status of the battery is indicated by an LED-indication on the footswitch itself, so that the user can decide when the footswitch needs to be recharged. • The wireless footswitch can easily be cleaned in water. It has high water ingress protection standard (IPX8). • The wireless footswitch has an on/off switch. It can be switched off when not in use. When the footswitch is active, but not in use, it will go into a sleep-mode. It will be re-activated when touched or when one of the pedals is pressed. 	
11	**NCVA706	ViewForum on Xper Module	1
		This option integrates the ViewForum application in the Allura Xper system. It allows operation of ViewForum with the Xper module in the examination room during an examination. Display of ViewForum imaging in the examination room has to be arranged for the monitor ceiling suspension with an additional monitor or with MultiVision (sharing an existing monitor). Following ViewForum viewing functions are available on the Xper module: <ul style="list-style-type: none"> • study selection • replay control (start/stop/autocycle, run step, image step) • Report selection (with page step, close report) • image settings (adjust Contrast, Brightness, Edge enhancement) and reset to original settings 	
12	**NCVB179	Ceiling Rail extension set lateral	1
		Extension of ceiling rail at headside of the table, to enlarge the parking distance of the lateral ceiling mounted stand. Maximum extension is 1.5 meters. Movement of the lateral ceiling mounted stand is motorized over the full length of the rail.	
13	**FCV0587	Xper Live/Ref Slaving	2
		This option contains a kit to split the Live or Ref video source from the Allura Xper. The total amount of Xper Live/Ref Slaving that can be selected is maximal. 4. Additional monitors are not included in this option and must be ordered separately. This kit contains a video splitter and a cable set for one slave monitor. The Slave monitor is not powered by Allura.	
14	**NCVA673	Biplane FD SmartMask	1
		SmartMask simplifies roadmapping procedures by overlaying a selected reference image with fluoroscopy on the live monitor fluoroscopy in the exam room. Smartmask can be applied to both the frontal and lateral channel simultaneously. The reference image can be faded in/out with variable intensity, controlled from tableside. SmartMask uses the reference image displayed on the reference monitor. Any previously acquired image can be used as reference.	

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Line #	Part #	Description	Qty
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SmartMask facilitates pre- and post- intervention comparisons to assess treatment results.

Compatible with

. Allura Xper FD10/10 rel.2 onwards.

- Allura Xper FD20/10 rel.1 onwards

. Allura Xper FD20/15

15	**NCVA121	FULL AUTOCAL	1
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The AutoCal option is a software package to be used in conjunction with quantitative analysis software packages. It provides an auto calibration procedure for an object to be analyzed that is placed in the iso-center. When the object to be analyzed (e.g. Left Ventricle Vessel Segment) is placed in the iso-center AutoCal avoids the need to:

- acquire an additional image series containing a sphere or grid for calibration purposes
- calibrate manually on a calibration object (e.g. catheter) displayed in the image or image series to be analyzed

16	**NCVB893	ViewForum for CV with LCD	1
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ViewForum combined with the Allura Xper System provides a parallel working environment to increase patient throughput and procedure efficiency. It allows for parallel viewing and processing of previously acquired images. These images can be from the current or previous patient. The ViewForum enables a multi-modality work environment for physicians and staff in preparation and review of CT, MR, US and X-Ray studies. The viewforum includes a 19" LCD color monitor for the control room.

The ViewForum standard functionality includes:

- visual shutters, stack and tile viewing, cine, movie-export, sequence generation of volumes and projections, linking annotations and measurements
- Print Protocols and Editor.
- Full DICOM communications (Incl. Query and Retrieve, import and export).
- CD and DVD Writing (DVD+RW), a DICOM viewer will be burnt with all CD's and DVD's
- Support for DICOM Standard Grey-scale for best image quality.

The ViewForum includes the X-ray vascular package. The X-ray Vascular Analysis package enables advanced, off-line vascular processing. All processing settings of the acquisition system remain available and can be manipulated to obtain optimal results for reporting or further detailed analysis.

The package includes:

- Remasking
- Subtraction (incl. run subtraction)
- Manual Pixel Shift
- Split Screen (horizontal or vertical split)
- AutoWarp Pixel Shift("rubber band" transformations)
- Landmarking or Viewtrace (for CO2 and Iodine)
- Automated Vascular Analysis (AVA) for stenosis measurements

Viewforum operates on Microsoft Windows Embedded Standard

Compatible with: Allura Xper FD20 series

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Line #	Part #	Description	Qty
		<p>Comprising:</p> <ul style="list-style-type: none"> - High end workstation hardware (min. configuration: 4x 1GB memory, 146 GB HDD, 256 MB graphical card) - 19" SXGA LCD color monitor - ViewForum Rel. 6.3 software or higher - X-Ray vascular package - Instruction For Use <p>Clinical Education Program for View Forum</p> <p>CV View Forum Handover OnSite Education: Philips Education Specialists will provide sixteen (16) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 224-100615</p>	
17	**NCVB868	CX50 Video and UI coupling	1
		<ul style="list-style-type: none"> • View ultrasound images on the exam room monitors • Control the CX50 ultrasound system via the X-ray system's touch screen module • Gain insight into soft tissue anatomy <p>View ultrasound images in the interventional suite</p> <p>During interventional procedures, ultrasound imaging can provide critical insights into soft tissue anatomy. The CX50 system can be fully integrated into the X-ray system with the CX50 video and UI coupling. The CX50 is controlled at the table side by the touch screen module with the ultrasound image displayed on the X-ray system's monitors. In addition, all patient data is shared automatically between the X-ray and ultrasound system eliminating workflow duplication.</p>	
18	**NCVA101	Peripheral X-ray Filter	1
		<p>Set of flexible x-ray filters to provide an uniform density in angiographic examinations of the lower peripheral area.</p> <p>Comprising:</p> <ul style="list-style-type: none"> • one central filter, at the top edge provided with sizing markers at every 5 cm, length : 1 m • two side filters, length: 1 m 	
19	**NCVA851	Swivel for table base.	1
		<ul style="list-style-type: none"> • Simplifies patient positioning • Easy patient transfer <p>Simplifies patient positioning</p> <p>The swivel option with pivot movement allows you to easily move the table to reach upper and lower peripherals for angiographic and interventional procedures. Swivel the table from side-to-side or pivot the table on its vertical axis. The table moves with less friction, making it easier to move larger patients. A secure mechanism locks the tabletop in place to prevent it from moving.</p>	
20	**NCVA791	Xper Table Tilt	1
		<p>This innovating SyncraTilt enhances the accuracy and efficiency of gravity-oriented procedures. It is available as an option for the Xper table in Allura Xper series systems.</p> <p>SyncraTilt is ideal for interventional, myelography, phlebography and head down procedures because it provides more precise imaging of contrast medium, blood, or objects in the body.</p>	

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With SyncraTilt, the isocentre is automatically located at the isocentre of rotation and angulation of the stand. If the longitudinal position of the stand changes, the tilt isocentre is changed to match with the new stand position. As a result, the region of interest is always centred

As the table tilts, the X-ray beam automatically coordinates to the movement.

The table floats even when tilted, and the region of interest can be followed by panning the tabletop.

When combined with the Bolus Chase option, SyncraTilt enables phlebography to be performed with a head-up tilted patient.

The option provides:

- maximum tilt range:
 - 17 degrees (head down) to +17 degrees (head up).
 - tilt speed: 2 degrees/sec
 - automatic safeguarding system with manual override
 - panning range in tilted plane: equal to the standard
 - tabletop specifications (longitudinal 120cm, lateral 35cm)
 - easy to use controls
- Comprising:
- Tilt drive with user controls

Compatible with:

- . Xper table in Allura Xper FD series Rel 3 onwards (monoplane versions) and Rel 2 onwards (biplane versions)
- . Bolus Chase
- . Pivot for table base
- . swivel for table base

21	**NCVB199	Table top brake kit for the Xper Table	1
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- Prevents tabletop movement when power goes off

Prevents tabletop from floating during power off situation

The tabletop brake kit prevents the tabletop from floating in case of a power off situation. A friction brake is applied to stop the tabletop from moving longitudinally or laterally.

22	**NCVB172	3D-RA R.6 3D-Roadm. Integr. R2	1
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The integrated 3D solution extends the interventional capabilities of the 3D-RA applications. To achieve this the 3D imaging channel has been integrated into the X-ray system and operates in parallel with the 2D X-ray imaging chain providing a breakthrough in performance.

The integrated 3D solution offers:

Real time 3D reconstruction: This allows instant availability of the 3D reconstruction immediately after the exposure run. 3D follow C-arc: The 3D volume automatically follows the position of the C-arc, so the 2D view and 3D volume are always aligned.

3D automatic position control: When the user selects an optimal working position from the 3D volume, the C-arc automatically steers itself to the selected position.

Workflow automation: The complete 3D process is fully automated. Acquired images are reconstructed automatically and the volume appears instantly on the monitor: No user action is required.

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		<p>The integrated 3D solution is a key enabler for advanced interventional 3D functionality such as 3D-roadmapping.</p> <p>Allura 3D-RA assists physicians in decision making for treatment strategy in endovascular procedures, neuro or vascular surgery or even radiotherapy.</p> <p>Allura 3D-RA reduces the number of DSA acquisitions and fluoroscopy time needed to perform an examination. This means less X-Ray dose for the patient and the medical staff and a reduced quantity of dye, leading to reduced procedure costs.</p> <p>Allura 3D-RA provides a unique assessment after treatment due to the use of non-subtracted images that allows to shows devices stents, coils, clips and provide the optimal stand projection for endovascular treatment.</p> <p>Allura 3D-RA provides a wide range of communication facilities to export 3D images.</p> <p>1 Image Acquisition</p> <p>Image acquisition is performed with the Rotational Angiography feature of the Allura Xper FD series with the flexibility to position the C-arm in either head or side position.</p> <p>C-arm in Head position: the Rotational Angiography run is performed over a scan range of 240 degrees with a rotation speed up to 55 degrees/sec.</p> <p>C-arm in Side position: the Rotational Angiography run is performed over a scan range of 180 degrees with a rotation speed up to 30 degrees/sec.</p> <p>2 3D Vessel Reconstruction</p> <p>The rotational run is automatically transferred and displayed as a 3D vessel model: with the Real-Time digital link (option) 120 images are reconstructed into a 3 dimensional model within seconds. Additional reconstructions, using the Reconstructive Zooming Technique, can be performed as well.</p> <p>3 Workflow:</p> <p>Allura 3D-RA in combination with the Allura Xper FD series will provide an optimal workflow via the following workflow enhancers:</p> <p>Complete automated 3D-RA process from 3D acquisition to 3D Viewing: no user interaction needed.</p> <p>3D Automatic Position Control (3D-APC); When the optimal working position has been chosen via the Allura 3D-RA interventional tool, the C-arc will automatically steer to this position.</p> <p>3D Follow C-arc; When the position of the C-arc (not using any X-ray) is changed, the 3D volume will automatically follow the position of the C-arc. This means the position of the C-arc (and therefore the 2D projection) and the 3D volume are always aligned. As last seen; when the user leaves the patient in the model and later selects that patient again, the Allura 3D-RA interventional tool will return to the image last used by the user.</p> <p>Mouse over: When moving the mouse cursor over a button the mouse over text will show up to explain the function of that specific button.</p> <p>4 Calibration</p> <p>Allura 3D-RA calibrations are performed by Philips Healthcare Customer Support. Allura 3D-RA calibration data are stable over at least 6 months time.</p> <p>5 Viewing</p> <p>A Real Time user interface is available with 3D-RA, providing 3D object viewing in any space direction. A graphical display of (C-arm) stand position including angulation/rotation for any projection.</p> <p>Philips' CRM (Contrast Resolution Management) Technology for a considerable increase in contrast resolution in all volumes.</p> <p>Various Image Rendering possibilities: Volume/Surface Rendering, MIP, Endoscopy, SUM (pseudo x-ray image) Gradient rendering; the possibility to display the vessel structure transparently.</p> <p>Cut-plane function to get a precise insight of the shape of the pathology</p>	

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		<p>Orthoviewer providing a multi-planar visualization of objects using the different Image Rendering possibilities.</p> <p>MPR (Multi-Planar Reformatting): enables visualization of the volume in all three standard projections (coronal, sagittal and axial) Especially useful for optimal viewing of spine procedures (e.g. Vertebroplasty)</p> <p>SpineView: special acquisition protocol for optimal viewing of the spine, especially osteoporotic vertebrae</p> <p>CalciView: allows visualization of Hyper dense plaque in 3D, separately or in relation to the lumen. 5 different distance measurements calculated in the same volume, including "Quick measurement" feature</p> <p>Volume calculation</p> <p>Automated Vessel Analysis (AVA), provides information on vessel segment diameter, area and length with only three mouse-clicks. Endoscopic and cross sectional views are available.</p> <p>Computer Assisted Aneurysm Analysis (CAAA), providing information on Aneurysms, like volume, neck size etc..</p> <p>Catheter tip shape simulation, providing information on how to shape the catheter tip.</p> <p>Virtual stenting; Ability to simulate a stent placement in a selected vessel segment for proper stent sizing. All relevant data of the simulated stent are displayed</p> <p>Annotation: text can be added to a volume to capture comments.</p> <p>Interpolative Zoom</p> <p>Reconstructive Zooming Technique, 2 additional user defined reconstructions focused on the Volume Of Interest (VOI) using different cube size and voxel resolution.</p> <p>Subtraction of reconstructed volumes, allowing to visualize vessels without embolization devices (stents, coils, clips,...) to assess the outcomes of treatment</p> <p>Automatic Voxelshift: compensates for movement when rendering subtracted or superimposed volumes</p> <p>Set the grey values WW/WL</p> <p>Store/Recall of user defined projections.</p>	
		<p>6 3D-RA on Xper Module</p> <p>The 3D-RA on XPER MODULE integrates the off-line 3D-RA application in the Allura Xper system. It allows operation of 3D-RA with the Xper module in the examination room during an examination. Display of 3D-RA imaging in the examination room has to be arranged for the monitor ceiling suspension with an additional monitor or with MultiVision (sharing an existing monitor). Following 3D-RA functions are available on the Xper module:</p> <p>Image rotation</p> <p>Image translation</p> <p>Start mouse mode</p> <p>Snapshot</p> <p>Segmentation (window-width/window-level control)</p> <p>3D zoom control</p> <p>Store/recall views</p> <p>Recall Anterior-Posterior view</p> <p>Select 3D APC / Follow stand mode</p>	
		<p>7 3D Roadmap</p> <p>3D Roadmap extends the capabilities of the integrated 3D product by providing a sustainable 3D roadmap to support interventional procedures. The 3D Roadmap option matches the real-time 2D fluoro images with the 3D-RA reconstruction of the vessel tree. It provides a 3D real time insight of the advancement of the guide wire, catheter and coils through complex vessel structures.</p> <p>Image Acquisition</p> <p>The 3D Roadmap is based on the visualization of the vessel tree out of 3D-RA The 3D Roadmap is activated with one button touch at tableside (Xper Module). Select the 3D Roadmap function on the touch screen module, activate fluoroscopy and the 3D Roadmap is activated. The "live" 2D</p>	

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fluoroscopy image is overlaid with the 3D volume of the vessel tree and is automatically displayed on the 3D roadmap monitor in both the examination and control room.

Table side control

The bidirectional link between the X-ray system and the 3D Roadmap allows the user to select the optimal stand position for the procedure in two ways. 3D Automatic Position Control allows the gantry to automatically move to the best interventional projection as shown on the 3D Roadmap monitor. 3D Follow C-arc allows the 3D Roadmap to remain in sync with the 2D projection, automatically adjusting viewpoint as the gantry is repositioned

The 3D roadmap is dynamic, providing the freedom to change:

- The angulation of the C-arc;
 - The rotation of the C-arc;
 - The Field of View;
 - The Source to Image Distance.
- i.e. if the geometry system is changed, the image angle changes accordingly, real-time.

Intuitive, fully controlled from tableside:

- Landmarking to adjust the intensity of the anatomical reference surrounding the vessels;
- 3D blending to fade in/out the 3D view;
- WW/WL settings to control the contrast/brightness;
- Store and review runs for reporting and archive purposes;
- Store snapshots and movies

8 Archiving

Transfer to:

Optional Hard Copy unit (DICOM Print)

Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D

Any PC in a standard PC compatible format (JPEG,AVI)

One or multiple DVD's, CD-ROM(s) for easy archiving

Store a subset of exportable objects (snapshots and AVI Movies) to a USB removable memory device.

CV 3DRA Handover OnSite Education:

Philips Education Specialists will provide sixteen (16) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 222-100615

23	**NCVC327	XperCT Dual	1
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XperCT Dual extends the capabilities of the interventional suite offering CT like imaging to visualize bone, soft tissue and vessels in case of contrast enhanced acquisition. XperCT Dual protocols are available covering routine procedures such as biopsies and drainages but also advanced procedures such as abdominal oncological imaging up to neuro high resolution stenting. All protocols can be selected at the tableside via the XperModule.

The DualPhase dual view functionality allows the simultaneous visualization of two 3D datasets

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acquired at different times of the procedure such as the arterial and post-arterial contrast enhancement in oncologic liver imaging. In this DualView, XperCT Dual allows the segmentation of multiple lesions at the same time in the viewed datasets.

XperCT Dual acquires up to 60 frames/sec. (frame rate extension to 60frames/sec is included) and supports fast abdominal protocols with 5 to 10 second acquisition time for Allura release prior to 8.2 and even 5 to 8 second acquisition times for Allura release 8.2 or higher, thereby minimizing respiratory artifacts. The XperCT volume is displayed automatically within 8 to 15 seconds after acquisition. No user interaction is required.

XperCT Dual includes Metal Artifact Reduction to reduce the artifacts caused by metal presence in the region of interest. In case the original XperCT shows metal artifacts, the interventional radiologist can perform a second reconstruction and select for Metal Artifact Reduction, which will remove the artifacts caused by the metal present. The most typical examples of metal presence are: metal implants, coils or stents with stainless steel structures. Moreover, BMI Noise Reduction is included to reduce the noise caused by large size patients.

Note: BMI Noise Reduction is only available when Abdominal XperCT runs are selected

The XperCT volume can be viewed in the control room and in the examination room. The viewing package comprises:

- 3D volume viewing in any desired orientation
- Slice viewing in any desired orientation
- Slice viewing at any slice thickness with a minimum of 0.5 mm
- Five distance measurements calculated in the same volume, including "Quick measurement" feature
- Cut-plane functionality to provide precise insight into anatomical structure
- Unique high-resolution reconstructive zoom technique
- Graphical display of stand position including rotation and angulation parameters
- Contrast and brightness control
- Contrast resolution 5-10 Hu
- Spatial resolution of the initial reconstruction: 10 lp/mm
- Contrast range -1000 to 2000 Hu
- High resolution imaging mode produces
- 512x512x512 volume rendered reconstructions
- XperCT Dual can be controlled via the Xper module and the mouse at tableside.

The XperCT volume can be matched with (when additional options are available) Allura 3D-RA and pre acquired CT, PET/CT or MR volumes. This view allows combining multiple images from different modalities in order to provide additional anatomical insight. This multimodality volume can be viewed with the following functionalities:

- Registration of the two volumes from the same patient
- The resulting volume can be viewed with complete 3D-RA viewing functionality
- The XperCT slice can be overlaid onto the 3D vessel for better assessment of the region of interest
- Three different contrast rendering options to allow optimal viewing of the 3D vessel in the soft tissue structure

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Line #	Part #	Description	Qty
		<ul style="list-style-type: none"> • (128x128x128, 256x256x256, 384x384x384 and 512x512x512 volumes) • Movie clip recording functionality (AVI) to capture dynamic views • 3D automatic position control at tableside: When an optimal working position is selected from the XperCT volume the C-arc steers itself to the selected position • 3D Follow C-arc at tableside: When selected, the XperCT volume automatically follows the position of the C-arc. • XperCT data and 3D-RA with XperCT Dual overlay is stored in the same patient file as all other patient related data. All this data can be reviewed at any time 	

XperCT data can be sent to:

- Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Any PC in a standard PC compatible format (JPEG,AVI)
XperCT datasets can be stored/achieved on:
 - A PACS systems as DICOM Secondary Capture images or movies
 - USB removable memory device
 - One or multiple DVD's, CD-ROM(s) for easy archivingHard copy via the (DICOM Print) protocol

Clinical Education Program for XperCT

CV XperCT Handover OnSite Education:

Philips Education Specialists will provide eight (08) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 335-100615

24	**NCVC467	AneurysmFlow	1
<p>AneurysmFlow is an interventional software tool that extends the capabilities of the interventional NeuroSuite. AneurysmFlow provides relevant information to the interventionalist during cerebral aneurysm embolization treatment based on quantification of blood flow changes. AneurysmFlow provides color coded representation of flow changes of digital subtraction angiography (DSA). It can quantify blood flow rates in the artery and visualize blood flow patterns in an aneurysm. It also provides a comparison between pre-, peri- and post-procedural color coded images and calculates the Mean Aneurysm Flow Amplitude (MAFA value) representing the reduction of blood flow in the Aneurysm. It helps the interventionalist to better gauge the impact of flow diverter deployment. AneurysmFlow can be controlled at the tableside via the touch screen module and in the control room.</p> <p>AneurysmFlow assists during endovascular procedures for treating of saccular cerebral aneurysms of 5 mm and larger with flow diversion devices, by:</p> <ul style="list-style-type: none"> • visualization of blood flow patterns in the aneurysm and parent vessel • quantification of the blood flow in the parent vessel • quantification of the change in blood flow in the aneurysm pre-, peri- and post-procedure based on digital subtraction angiography (DSA) 			

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Line #	Part #	Description	Qty
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AneurysmFlow is intended to be used in combination with a Philips interventional X-ray system and proprietary 3DRA data. The software consists of a workflow-oriented structure, which involves the following essential elements:

1. Acquisition of high-speed angiograms acquired at 60 fps, using a dedicated EPX
2. Automatic registration of the 2D angiograms with previously acquired 3DRA datasets
3. Automatic segmentation of the 3DRA data in order to identify the parent artery and to automatically calculate the parent artery flow
4. Manual identification of a region of interest for which flow information is calculated and displayed
5. Calculation of flow in aneurysm and in its parent artery.
6. Manual marking of contour and calculation of the compensated MAFA ratio
7. Manual vessel time intensity analysis

AneurysmFlow analysis data can be exported:

- USB device (csv and/or DICOM format)

AneurysmFlow datasets can be stored/archived on:

- A PACS systems as DICOM Secondary Capture images or movies
- PACS system with 3D-XA settings configured
- One or multiple DVD's, CD-ROM(s) or USB for easy archiving

Clinical Education for AneurysmFlow

Philips Imaging Systems Clinical Education Specialist will provide sixteen (16) hours of education for up to four (4) students, as selected by customer, including technologists from weekend/night shifts as necessary. CEU credits are not available for this portion of training. Please refer to guidelines for more information. Note: Site must be patient ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately).

25	**NCVB878	Interventional Tools Hardware	1
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26	**NCVB167	MR/CT Roadmap	1
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Philips MR-CT Roadmap tool allows re-use of the vessel tree image from previously acquired MRA (MR angiography) or CTA (CT angiography) scans for endovascular navigation.

Key benefits

- Roadmap on previously acquired MR and CT angiography datasets, reducing the need for additional X-ray dose and contrast medium
- Reduce treatment risks for patients with renal insufficiency or young patients who are considered X-ray dose sensitive
- Perform procedures with a high level of precision thanks to real-time compensation for gantry and table movement

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Line #	Part #	Description	Qty
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Accurate 3D guidance for complex interventions

Patients undergoing complex vascular interventions often receive high-resolution CT or MR scans in the diagnostic phase. To manage patients' exposure to additional X-ray dose and contrast medium during the intervention, Philips MR-CT Roadmap tool allows re-use of the vessel tree image from previously acquired MRA (MR angiography) or CTA (CT angiography) scans for endovascular navigation.

Specifications

MR/CT Roadmap extends the capabilities of the integrated 3D product by providing a sustainable 3D roadmap based on previous acquired CT or MR scans to support interventional procedures.

Image Acquisition

A previously acquired CT or MR scan can be imported into the system and matched with a low dose 3D-RA or XperCT scan. The MR/CT Roadmap is activated with one button touch at tableside on the touch screen module. The "live" 2D fluoroscopy image is overlaid with the MR/CT volume presented in 2D or 3D and is automatically displayed on the roadmap monitor in both the examination room and control room.

Intuitive, fully controlled from tableside:

The bidirectional link between the X-ray system and the MR/CT Roadmap allows the user to select the stand position for the procedure in two ways. 3D Automatic Position Control allows the gantry to automatically move to the best interventional projection as shown on the MR/CT Roadmap monitor. 3D Follow C-arc allows the MR/CT Roadmap to remain in sync with the 2D projection, automatically adjusting viewpoint as the gantry is repositioned.

- Easy 2 step registration of the MR/ CT volumes
- Landmarking to adjust the intensity of the anatomical reference surrounding the vessels and tissue
- 2D and 3D blending to fade in/out the 2D or 3D view
- WW/WL settings to control the contrast/brightness
- Store and review runs for reporting and archive purposes
- Store snapshots and movies

MR/CT Roadmap data can be exported to:

- Any optional DICOM compatible device(e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Support archive on one or multiple DVD's, CD-ROM(s)
- Image transfer to a standard PC compatible format (JPEG, AVI)
- Store a subset of exportable objects (snapshots and AVI Movies) to a USB device.

27	**NCVB641	VasoCT	1
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The VasoCT interventional tool helps to visualize sub-millimeter sized vascular anatomy and endovascular material during neuroradiology interventions

Key benefits

- Enhances visualization of endovascular devices (stents, flow diverters etc.) and vessel morphology down to perforator level.
- Allows visualization beyond the clot with peri-procedural imaging of the distal vessel aspects in ischemic stroke.

Reveal hidden complexities

The ability to visualize sub-millimeter sized vascular anatomy and endovascular material during neuroradiology interventions enhances the clinician's ability to judge the chances of success and raises their treatment confidence. The VasoCT interventional tool was designed to meet these

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Line #	Part #	Description	Qty
		<p>requirements and to help clinicians further enhance clinical outcomes, and reduce procedural complications and patient trauma.</p> <p>This novel interventional acquisition technique provides high-resolution 3D imaging that reveals key information about cerebral vascular structures to support the spatial assessment of vessels in the soft tissue context. It is designed to increase the confidence with which clinicians plan, perform, and follow-up on various endovascular neuro procedures. Three protocols are provided to enhance visualization of different devices and pathology: high resolution VasoCT, intra-arterial enhanced VasoCT, and intra-venous enhanced VasoCT.</p> <p>Specifications</p> <p>VasoCT is available for X-ray systems with an FD20 detector on the frontal Arc.</p> <p>The VasoCT package contains everything that is needed for to perform VasoCT imaging such as:</p> <ul style="list-style-type: none"> • VasoCT software package • Instruction video • Instructions for Use 	
28	**980406041009	<p>Rad Shield w/ Arm (Contoured)</p> <p>61X76</p> <p>Contoured Rad Shield with Arm rest. 61X76</p>	2
29	**989801220273	<p>Ceiling Track w/Column & Handle Ext</p> <p>Mavig 2.5m Ceiling Track with Ceiling trolley, 360 degree column, and brake handle extension.</p>	2
30	**989801225022	<p>Medrad Mark 7 Arterion Pedestal</p> <p>The Arterion Mark 7 Pedestal contrast medium injector can be positioned anywhere at the patient positioning table on a mobile unit, for direct operation of all functions in the examination room.</p> <p>The injector system includes:</p> <ul style="list-style-type: none"> - A mobile pedestal stand with electronics unit and a connection cable to the manual release. - A support arm with injector head and a control lever for moving the injector head. - A user control console with large touch screen and corresponding additional monitoring display on the injector head. <p>Functions</p> <p>Pressure limitation:</p> <ul style="list-style-type: none"> - for 150 ml syringes 689 to 8273 kPa, corresponds to 100 to 1200 psi. . <p>Flow rates for 150 ml syringes:</p> <ul style="list-style-type: none"> - 0.1 to 45 ml/s in increments of 0.1 ml/s - 0.1 to 59.9 ml/min in increments of 0.1 ml/min - rise/fall: 0 to 9.9 s in increments of 0.1 seconds <p>Release delay for injection or radiation:</p> <ul style="list-style-type: none"> - 0 to 99.9 s in increments of 0.1 s. <p>Adjustable volume for 150 ml syringes:</p> <ul style="list-style-type: none"> - 1 ml to the max. syringe capacity in increments of 1 ml. <p>Fill rate:</p> <ul style="list-style-type: none"> - Variable syringe filling speed 1-20ml/s. <p>Injection protocols:</p> <ul style="list-style-type: none"> - Up to 40 injection protocols possible. <p>Parameters currently displayed on the touch screen display and on the head display:</p> <ul style="list-style-type: none"> - Injection speed - Injection volume 	1

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Line #	Part #	Description	Qty
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- Remaining volume
 - Injection duration
 - Applied pressure
- Contrast medium heating:
- Nominal 35°C (95°F)±5°C (9°F)

Injection data memory

- Up to 50 injection data items stored

Included in the scope of delivery

- Injector standard configuration 150 ml
- Philips interface cable
- Operator Manual
- Service manual (English).

Power supply

100-240 VAC 50/60 Hz 1000VA.

31 **989801299617 XD8982ALLURAXPERCLARITY 1
REL8.2CTC5D

Allura Xper / Clarity release 8.2

Course Number: XD8982

System Codes: 722-026, 722-027, 722-028, 722-029, 722-033, 722-034, 722-035, 722-036, 722-038, 722-039

Course Title: Allura Xper / Clarity release 8.2

Course Length: 5 days

Delivery Method(s): ILT

Modality: iXR-CV

Location: PHC and CTC

Target Audience: CS Field Service Engineers

DESCRIPTION:

This course will provide information on and in insights in the differences between Allura Xper release 8.1 and Allura Xper / Clarity release 8.2.

PREREQUISITES:

XD3970, Allura Xper Rel 7.6 part 1(Or history courses XD3966 & XD9065 or XD3875 & XD9065);

Field experience;

XD9906, Allura Xper update to R8.1;

FC9021 Cat Tool.

COURSE OBJECTIVES:

Upon completion of this course and using the appropriate service manuals, the FSE can:

- Identify differences between the 8.1 release and the 8.2 release.
- Recognize new system parts.

- Certeray Generator

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Line #	Part #	Description	Qty
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- motion control Clea-stand
- FD20 and FD15 detector
- AD7XT and AD7XNT table
- Power Supply gPDU
- Cabinet layout and cable routing
- Identify and sequence the steps to installing an 8.2 release.
- Identify the new service documentation structure
- Identify the Diagnostic CM procedures.

* PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF SUPPORT OR ASSIST AGREEMENT.) Course dates and location to be finalized by _____ shall attempt to accommodate Customer requested dates and training location. The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through _____

IMPORTANT Notes Regarding Admission to Customer Engineer Training Courses:

1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Nondisclosure statement
4. Trainee must sign Nondisclosure statement
5. Customer must sign terms and conditions of training

32 ****989801299780** **XD3894 ALLURA XPER REL8.2** 1
 ESSENTIAL

PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF SUPPORT OR ASSIST AGREEMENT.) Course dates and location to be finalized by _____ shall attempt to accommodate Customer requested dates and training location.

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Line #	Part #	Description	Qty
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The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through Philips.

IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

Course Number:

XD3894

Course Title:

Allura Xper release 8.2 Essentials

CSIP Level:

All course materials are on CSIP level 1

Course Length:

9 days

Delivery Method(s):

ILT

Modality:

iXR

Location:

PHC, CTC, SLC, HCA

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Line #	Part #	Description	Qty
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Target Audience:

Field Service Engineers (multi-modality)

Licensed Representatives

System Code(s):

Associated system codes: 722-026, 722-027, 722-028, 722-029, 722-033, 722-034, 722-035, 722-036, 722-038, 722-039, 722-058, and 722-059

Document Date:

2015-05-26

DESCRIPTION:

After successfully finishing this training the Engineer reaches compliance to work on the above mentioned system codes. The training is performed on "basic" system configurations. Commercially available system options are only partially covered; these are offered as separate courses.

Aims of this training are :

- The engineer will learn how to:
- perform planned maintenance.
- execute a repair of the system.
- perform 1st line fault diagnosis on the system.

Topics covered:

- Planned Maintenance
- plan visits
- perform preparation:
- customize planned maintenance modules
- determine visit type
- get latest planned maintenance instructions
- determine needed tools and materials
- operate the system; basic understanding of system operation
- use software service tools; field service framework and the Xper management tool on a basic level.
- perform the following planned maintenance instructions:
- general planned maintenance
- adjust generator, adjust image detector and perform level 1 Image Quality measurements
- adjust geometry
- patient support AD7X(N)T

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Line #	Part #	Description	Qty
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- radiation safety
- electrical safety
- XtraVision release 8.8.1/9.0.x
- finishing activities

Repair

For these repairs it is assumed that the fault diagnosis has been done by remote support, tier 2 or tier 3.

- Identify “all” Field Replaceable Units of the Allura Xper rel. 8.2 system
- Find the correct service instruction to replace a Field Replaceable Unit
- Identify connections between parts using the corrective maintenance manual
- Perform replacement cases; demonstrate replacement of various parts using the appropriate repair manual.

First line fault diagnosis

Use the Corrective maintenance manual for faultfinding

- diagnostic flows (90%)
- functional diagrams (5%)
- led indications (5%)
- Learn how power is distributed
- Escalate to helpdesk
- Perform various fault finding cases
- power on problems
- movement problems
- acquisition problems

PREREQUISITES:

All of the below courses:

- FC9002 – Safety
- FC9003 – Imaging Systems Safety
- XD3007 – X-Ray Systems basic part 2
- XD9903 – Anatomy and pathology of the heart and bloodvessels
- XD9904 – Allura Xper Operation and Clinical Workflow
- FC9017 – Basic Networking

COURSE OBJECTIVES:

Upon successful completion of the course the learner will be able to:

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Line #	Part #	Description	Qty
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- perform planned maintenance on the system according the planned maintenance instructions.
- execute a repair of the system with the help of available repair manuals.
- perform 1st line fault diagnosis on the system using the corrective maintenance manual.

33 ****989801220381 Seismic Full Load Remote UPS 1**

MGE Galaxy 5000 80 kVA Seismic Full Load – 40kW UPS with remote capability. Includes top feed cabinet and optional side panels, ISX0001369540
G5TUPSU80KPS
Custom Seismic Battery: Galaxy 5000 80kva Galaxy 5000 Adj. Battery System
OSHDP Seismic With Dynasty 300mr with 250 DC Breaker
High Voltage 6 Alarm Relays Card
MGE GALAXY 5000 Remote Alarm Status Panel
MGE GALAXY 5000 Seismic Kit UPS IBC2006
MGE SNMP/Web Communication Card
Top Feed Auxiliary Cabinet
In the event of a power loss the UPS provides emergency power to allow system function and full X-Ray exposure and fluoroscopy for up to 15 minutes

34 **SP019 Trade in Allowance 1**

Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.

Product: Siemens R/F
Serial Number: 1-9SXL7
Manufacturer: SIEMENS MEDICAL SOLUTIONS USA INC

Trade-In authorization number: 12345

De-install Date: Not later than 180 days after receipt of Order

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the "Trade-In"), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when removes the Trade-In from Customer's site (the "Removal Date");
2. Title to the Trade-In shall pass from Customer to on the Removal Date, unless otherwise agreed by and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless causes the delay, then may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. is responsible for normal de-installation costs of the Trade-In.

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Line #	Part #	Description	Qty
		7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.	
		8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.	
		9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.	

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OPTIONS

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Part #	Description	Qty	Each	Price	Initial
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1	**NCVB882	Cradle extension	1			
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- Moves the tabletop in a cradle motion from side to side to support surgical and puncture procedures
- Improves access to patients
- Allows precise imaging of contrast medium or blood

Precise imaging during surgery and puncture procedures

To obtain high quality imaging results and help in avoiding re-takes during surgical or puncture procedures, it can be useful to swing the tabletop from side to side in a cradle movement. This extension moves the tabletop in a cradle motion to improve access to patients. It also allows precise imaging of contrast medium or blood.

2	**FCV4894	Add.op-rail with cable ext.kit	1			
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The content of the additional OP-Rail kit is:

- [A] One additional OP-Rail (mechanical)
- [B] Cable Extension for OP-Rail
 - One Extension cable for Geo Module
 - One Extension cable for Imaging Module
 - One connection box (wherein the extension cables are coupled with the UI-Module cables.

[A]

- An extension for the table op-rail (30cm).
- The additional op-rail can be mounted at the both sides of the tabletop part where no op-rails are mounted.
- The additional op-rail is compatible with AD5 and XperTable (cardio and neuro) patient-tabletops.
- The op-rail has the same profile /dimensions as the current standard op-rail
- The maximum load (downwards) on the additional op-Rail is 100 N (F=100N)
 - (this is limited by the tabletop of the Patient Table)
- The maximum mechanical moment on the additional op-Rail is 40Nm downwards and 20Nm upwards
 - (this is limited by the tabletop of the Patient Table)

[B]

- The cable extension consists out of two cables with a length of 1.3 m; one for the Geo and one for the Imaging module, and an interface box were the coupling to the
- Geo and Imaging module cables can be made.