

673-B40014
Tampa, FL
XR-HYBRID

Line #	Part #	Description	Qty	Each	Price
1	**NNAE890	AlluraClarity FD20C FlexMove	1		

AlluraClarity FD20 FlexMove monoplane system is a state of art X-ray imaging system that can be customized to support a wide range of applications including peripheral, abdominal, cerebral, thoracic, cardiac and non-vascular interventional and diagnostic 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 FlexMove 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.

The AlluraClarity FD20 with FlexMove option allows placement in a normal operating theater.

- The new ceiling construction enables the use of Laminar Airflow.
- In case no imaging is needed, the system can be parked in the corner, which allows a normal operating area when doing open surgery and enables the user to make full use of the lab.
- The head-end side of the patient is still available for anesthesia and therefore not blocked by the Allura system.

GEOMETRY

The AlluraClarity FD20 FlexMove Stand

The Allura FlexMove stand is a stable assembly of a C-arm and a ceiling suspended L-arm. The ceiling suspended L-arm provides the following advantages:

- The new ceiling construction allows the system to be steered over the patient by using a joy-stick which prevents table panning which is not wanted in a lot of cases.

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- The system can be positioned behind a physician or someone of the staff which gives them all the space they need around the patient and can be moved in a simple manor whenever needed.
- The new ceiling construction allows the system to be moved around the patient and be brought in from any position.
- When a minimally invasive procedure has to convert to open surgery, the system can easily be moved out of the way.
- The Allura Xper system with FlexMove takes only limited amount of space around the table and for that reason has limited impact on the workflow of the physicians and staff in the room.
- The FlexMove option is available for two different ceiling heights being 2900mm and 3100mm.

The stand has the following capability:

- The L-arm can be rotated and can be moved in longitudinal direction allowing a three-sided patient approach and total body coverage.
 - L-arm rotation around the patient table: +90, 0, -90 degrees.
 - FlexMove coverage: Y stroke 4400mm, X-stroke 2600mm

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

- In the head position (0 degrees position, L-arm parallel to patient table):
 - 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):
 - 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.
 - 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 and longitudinal movement: 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 86.5 to 123 cm.
- The stand features BodyGuard a capacitive sensing collision avoidance system for patient protection.

Patient support

The Xper Table
Patient support with flat carbon fiber tabletop

- Table top length of 319 cm, width 50 cm

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- 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 comprises an integrated dedicated X-ray system, micro-processor controlled Velara CFD generator based on high frequency converter technique. The user interface control of this X-ray Generator is incorporated in the Xper module, Xper Desktop Viewing Console, and the Xper on-screen displays.

The Velara CFD generator comprises:

- X-ray generator 100 kW
- Voltage range is 40 - 125 kV
- Maximum current 1250 mA at 80 kV
- Program selection
 - Pulsed X-ray for pulsed fluoroscopy; 3.75, 7.5, 15 and 30 frames/s
 - Pulsed X-ray for (subtracted) acquisition up to 6 frames/s for vascular applications
 - Minimum exposure time of 1 ms
 - Automatic kV and mA control for optimal image quality prior to run to save dose
 - An X-ray depth collimator with two semi-transparent wedged filters with manual and automatic positioning
 - SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with MRC-GS 0407 X-ray tube.
 - Grid switching at dynamic pulsed fluoroscopy
 - Xper Beam Shaping, positioning of both shutters and wedges on the Last image Hold without the need for X-ray radiation

Fluoroscopy

- Three programmable fluoroscopy modes

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- 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
 - Roadmap Pro can be selected from the Xper imaging module and/or Xper module.
 - A vessel map is created and superimposed with (un)subtracted live fluoroscopy. Acquisition runs can be done during Roadmap without losing the vessel map. Roadmap Pro features Smart Settings in special clinical modes that are optimized to visualize special materials such as coils and glue. Live processing of the vessel map, the device map and the landmark map can be done on the Xper Module. Xres for vascular procedures is standard part of Roadmap Pro.
 - **Disclaimer:** AMC only corrects movement artifacts in two dimensions. Three dimensional movements such as swallowing or rotation of the head cannot be corrected.
 - In Roadmap Pro R2 "Automatic Motion Compensation" (AMC) is added to the roadmap functionality. During roadmap, small movements of the patient 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 (neurology) applications where subtraction imaging is applied.
 - Disclaimer: AMC only corrects movement artifacts in 2 dimensions. 3 dimensional movements like swallowing or rotation of the head cannot be corrected.
- 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 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.

Dynamic pulsed fluoroscopy 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

The AlluraClarity FD20 comprises the following image detection chain:

- A 30 cm by 40 cm FD20 Dynamic Flat Detector with eight imaging modes.
 - 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 digital output of the FD20 flat detector is 2k*2.5k image matrix at 14 bits depth for the largest mode
- The flat detector subsystem features Xper Access, the detector can be rotated over 90 degrees, it moves from portrait to landscape back & forth
- DQE (Detective Quantum Efficiency) >73 %
- The pixel pitch: 154 x 154 microns

Viewing

The AlluraClarity FD20 comprises the following components in order to display the clinical images in the control and examination room:

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Displays

Examination Room

Two 18-inch monochrome LCD monitors designed for medical applications. The first display is used for viewing live images. The second display is the reference monitor.

- 18-inch monochrome TFT-LCD display with a 160 degree viewing angle.
- 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, with FlexMove an integration kit is supplied for a third party Monitor Ceiling Suspension (MCS) containing crucial parts for operating the equipment.

Two medical monochrome LCD monitors are included for the exam room. One monitor is used for viewing of live images. The second monitor serves as the first reference display. Reference images or runs are controlled by infra-red remote-control Xper Viewpad.

- Of the two medical monochrome LCD monitors included in the MCS, one is used for viewing of live images and the other serves as the first reference display. Reference images or runs are controlled by infra-red 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. For cardiac applications, the system also monitors and displays body zone specific Air Kerma data (10 zones).

Control Room

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

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

One 18-inch monochrome LCD monitor (Xper review monitor) designed for medical applications.

- 18-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:

- 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

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- Subtraction functionality
- Zoom/pan functionality
- Electronic shutters
- Video invert
- View trace, stacking of images
- Landmarking

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 images/s at 2048 x 2048, 12-bit matrix

The Allura Xper FD20 offers a storage capacity of:

- 50,000 images at matrix size of 1024 x 1024
- 12,500 images at matrix size of 2048 x 2048
- 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, which customizes the system to each user preferred settings. 2) Xper User Interface 3) Xper Integration, which makes advanced integration functionality available such as DICOM Query / Retrieve, background archiving, and Xper Fluoro Storage.

The Xper User Interface uses User Interface modules in the Examination Room with On-Screen Display.

The On-Screen Display is positioned on the left side of the reference monitor. The following system information is displayed

- X-ray indicator and X-ray tube temperature condition
- Gantry position in rotation, angulation, and Source Image Distance
- Detector field size display
- General System messages
- Selected Frame speed
- Fluoroscopy mode
- Integrated fluoroscopy time
- Skin Dose and Dose Area Product
- Stopwatch

The Xper ViewPad contains the preprogrammed function settings. The system is provided 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

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- 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 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
- Image Processing

The Xper Geometry module can be positioned on all sides of the patient table, while keeping the button operation intuitive. The Xper Geometry module provides the following functionality:

- Tabletop float and table height position
- Source Image Distance selection
- Longitudinal movement of the Gantry along the ceiling
- Gantry rotation in an axis perpendicular to the ceiling
- Store and recall of two scratch gantry positions including SID
- Emergency stop button

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

- Fluoroscopy Flavor selection defined per Xper Setting
- Shutters and Wedge positioning
- Xper Fluoro Storage and Grab
- Selection of the Detector field size
- Shutter positioning
- Reset of the fluoroscopy buzzer

Pan Handle (NCVA081)

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

Control Room

The control room comprises a Xper Review Module, Xper Desktop Module, 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, and accumulative dose
- Frame speed settings, fluoroscopy mode, and accumulated fluoroscopy time
- Exposure and fluoroscopy settings as Voltage (kV), Current (mA) and pulse time (ms)
- Geometry information as rotation, angulation, and SID

Scheduling

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

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. Furthermore, 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 own room protocols. This preparation page makes hard copies of the protocol instructions redundant.

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

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.

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- RDSR enables analysis of average dose levels & variance for routinely performed exams and procedures.
- Typical system usage can be extracted from the data.

Archive

Continuous Autopush (NCVA090)

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 and wishes for programming under the Xper Settings,

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 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.

Remote Service

Access to the system from a Remote location is possible via network or modem connection.

Remote access to a system can shorten the time needed for e.g. changing system settings or problem diagnosis.

Clinical Education Program for the Allura Xper 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 purchased through Philips. It is highly recommended that 989801292102 (CV Full Travel Pkg OffSite) is purchased with all OffSite courses.**

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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

Clinical Education Program for FlexMove C-Arm

FlexMove C-Arm OnSite Education: Philips Education Specialists will provide twenty-four (24) hours of pre-training applications for up to (8) students selected by customer, including technologists from night/weekend shifts if necessary. This training will be coordinated to provide instruction on the operation of the FlexMove C-Arm prior to the Go Live handover date of the entire Allura Imaging System. **In the event that a Maquet OR table** with 24 hours of pre training has also been purchased this FlexMove 24 hour training will be used as a post handover follow up session. No CEU credits will be available for this session. Please refer to guidelines for more information. Note: The equipment must be entirely operational. Philips personnel are not responsible for actual patient contact or operation of the equipment during the education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment installation date (or purchase date if sold separately) . Ref #699-20110915

2	**NCVB947	XL screen video-share slaving	1		
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The XL screen video-share interface enables to share all information being presented on the large 56-inch screen in the Examination Room.

The XL screen video-share interface provides two, simultaneously available, video outputs:

- A full resolution video-output (Quad HD = 3840*2160 ; 8 MegaPixel)
- A downscaled resolution video-output (HD = 1920*1080 ; 2 MegaPixel).

The full resolution 8MP video-output is compatible with the following Dual DVI 3rd party monitors:

- Barco 56-inch: CML5682W4
- Eizo 56-inch: Radiforce LS560W
- Eizo 60-inch: Radiforce LX600W

The downscaled 2MP resolution video-output can be used to connect to a (3rd party) HD display or to a 3rd party recording/streaming/reviewing solution.

Note: The information provided at the 3rd party monitors (2 & 8MP) video output cannot be used for diagnostic purposes.

3	**NCVC078	Extension to Flexmove XL	1		
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The FlexMove XL option extends the range of the longitudinal movement by an additional one meter. This solution was developed to improve workflow by offering improved system park position choices and to enhance the system's ability to move around the operating area.

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4	**NCVC265	Prep table for Table Mount inj	1		
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This is only applicable when the Mark 7 Arterion Table Mount injector will be ordered locally. Prepared for Table Mount Injector prepares the XperTable with the cabling needed for a Table Mount install of the MEDRAD Mark 7 Arterion injector head. This preparation will facilitate the install of the Table Mount injector system. It will save an estimated 4 - 8 hours of installation time. The injector base unit can be placed in the technical room, and User Interface and display can be placed in the control room or on the wall of the exam room.

5	**FCV0629	Addl sets of documentation	1		
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Set of black and white copies of all documents, comprising (if applicable):

- User manuals
- Service manuals
- System manuals
- Test results

6	**NCVB618	HeartNavigator R1	1		
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Performing a structural heart procedure can be a breath-taking and tense intervention. HeartNavigator Release 1 provides support in planning of the procedure and additional live image guidance during the procedure. Previously acquired DICOM cardiac CT-datasets can be used as input. The CT-dataset can be presented in 3D and overlaid with the live-fluoroscopy to provide 3D real time insight during the procedure.

Planning:

DICOM Cardiac CT dataset can be used for the determination of the optimal intervention strategy. Optimal view planes for the X-ray device can be programmed with CT data. Furthermore, HeartNavigator Rel.1 is able to automatically segment anatomical structures, landmarks and planes out of DICOM cardiac CT-datasets. Different tools are available to help the user with the planning:

- Different anatomical visualization tools can be selected to visualize the desired anatomical structures
- Different anatomical landmark points are available to help the user to better understand the orientation and positioning of devices
- Different sizes of virtual devices which can be selected and projected on the CT data to give a reference on how the device would fit the patient

Image Acquisition en Procedure Execution:

During live image guidance HeartNavigator can be fully operated from table side using the XperModule. The user can overlay the acquired images on the 3D reconstruction of HeartNavigator.

The bidirectional link between the X-ray system and HeartNavigator 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 projection shown on the HeartNavigator monitor. 3D Follow C-arc allows the overlay to remain in sync with the 2D projection, automatically adjusting the viewpoint as the gantry is repositioned. Different visualization options are available like 3D volume and vessel outline to select as overlay.

Clinical Education for Heart Navigator:

iXR Heart Navigator OnSite Education: Philips Education specialist will provide sixteen (16) hours of education for up to (4) students selected by the customer . The Physicians performing the

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procedures are required to be part of the training session. CEU credits may be available for each participant that meet 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 the equipment during the educations sessions except to demonstrate proper equipment operation.

iXR Heart Navigator OnSite Live Case Follow Up Education: Philips Education Specialist will provide twenty -four (24) hours of education for Physicians and staff for live case use of the Heart Navigator software. This will be a follow up visit to the initial training of the Heart Navigator software. It is required that Live Valve implantation studies be performed during this education session. No CEU credits will be available for this session. 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 the equipment during the educations sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 694698-20110915

7	**NCVB171	3D-RA R.6	1		
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Allura 3D-RA assists physicians in decision making for treatment strategy in endovascular procedures, neuro or vascular surgery or even radiotherapy.
 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.
 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.
 Allura 3D-RA provides a wide range of communication facilities to export 3D images.

1 Image Acquisition

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.
 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.
 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.

2 3D Vessel Reconstruction

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.

3 Workflow:

Allura 3D-RA in combination with the Allura Xper FD series will provide an optimal workflow via the following workflow enhancers:
 Complete automated 3D-RA process from 3D acquisition to 3D Viewing: no user interaction needed.
 3D at Xper Module (option); With the Xper module the physician has all required 3D functionality at tableside. At the touch screen module functionality like rotating, panning, zooming, AVA, virtual stenting, 3D-APC and 3D Follow C-arc can be performed. With the mouse tablet all other functios

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can e performed so that there is is no need for the Physician to leave the examination room.

3D Automatic Position Control (3D-APC); When the optimal working position has been choosen via the Allura 3D-RA interventional tool, the C-arc will automatically steer to this position.

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.

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.

4 Calibration

Allura 3D-RA calibrations are performed by Philips Healthcare Customer Support. Allura 3D-RA calibration data are stable over at least 6 months time.

5 Viewing

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.

Philips' CRM (Contrast Resolution Management) Technology for a considerable increase in contrast resolution in all volumes.

Various Image Rendering possibilities: Volume/Surface Rendering, MIP, Endoscopy, SUM (pseudo x-ray image) Gradient rendering; the possibility to display the vessel structure transparently.

Cut-plane function to get a precise insight of the shape of the pathology

Orthoviewer providing a multi-planar visualization of objects using the different Image Rendering possibilities.

MPR (Multi-Planar Reformatting): enables visualization of the volume in all three standard projections (coronal, sagital and axial) Especially useful for optimal viewing of spine procedures (e.g. Vertebroplasty)

SpineView: special acquisition protocol for optimal viewing of the spine, especially osteoporotic vertebrae

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

Volume calculation

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.

Computer Assisted Aneurysm Analysis (CAAA), providing information on Aneurysms, like volume, neck size etc..

Catheter tip shape simulation, providing information on how to shape the catheter tip.

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

Annotation: text can be added to a volume to capture comments.

Interpolative Zoom

Reconstructive Zooming Technique, 2 additional user defined reconstructions focused on the Volume Of Interest (VOI) using different cube size and voxel resolution.

Subtraction of reconstructed volumes, allowing to visualize vessels without embolization devices (stents, coils, clips,..) to assess the outcomes of treatment

Automatic Voxelshift: compensates for movement when rendering subtracted or superimposed volumes

Set the grey values WW/WL

Store/Recall of user defined projections.

6 Archiving

Transfer to:

Optional Hard Copy unit (DICOM Print)

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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.

Clinical Education Specialists will provide sixteen (16) hours of tailored CV 3DRA OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Education Hours: Mon – Fri 8:00am to 5:00pm, except Monday and Friday are half-days to allow for trainer's travel. Note: 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 delivery date (or purchase date if not sold with equipment).

8	**NCVB775	FlexV XL xperHD for 3rd p. MCS	1		
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FlexVision XL with XperHD

FlexVision XL for Allura Xper FD & AlluraClarity systems with large 56-inch high resolution color LCD in the Exam Room. FlexVision XL is an integrated viewing solution designed to give you full control over your viewing environment.

The FlexVision XL provides the ability to:

- Display 2 to 8 screens simultaneously from up to 16 sources (incl. third party systems) on the Philips 56-inch color LCD in the Exam Room.
- Resize and/or enlarge information at any stage during the case.
- Select and customize viewing lay-outs of the Philips 56-inch color LCD via the Xper table-side module

XperHD on FlexVision XL brings High Definition viewing for clinical images. Native resolution of FD20 can be displayed. Excellent sharp and crisp clinical images can be displayed at full size without digital zoom.

Xper HD brings:

- 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
- Overview connected equipment (incl. third party systems) from a single location.

The FlexVision XL consists of:

- OmniSwitch
 - OmniSwitch allows the user to direct and switch the video output of all connected medical equipment to specific sub windows of the Philips 56-inch color LCD in the Exam Room.
 - OmniSwitch is a 16 channel video-switch operated from the Xper tableside module. 16 channels are available for a mix of up to 7 internal and up to 9 external inputs.
 - OmniSwitch supports a wide variety of display formats (up to 1600x1200).

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- External inputs are connected to OmniSwitch via Wall Connection box(es).
- Medical grade, high resolution color LCD in the Exam Room
- 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 system for the Exam Room.
- Main characteristics are:
 - 56 inch, 8 Megapixel color LCD
 - Native resolution: 3840x2160
 - Brightness: Max: 450 Cd/m2 (typical) stabilized: 350 Cd/m2
 - Contrast ratio: 1200:1 (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)
 - Resize and/or enlarge information at any stage during the case via the Xper tableside module in the Exam or Control Room
 - Select viewing lay-outs via the Xper table-side module in the Exam Room
 - Create new layouts by matching inputs to desired locations on preset templates.
- Isolated Wall Connection Boxes
 - Up to 8 Isolated Wall Connection Boxes can be connected to FlexVision XL.
 - Through Isolated Wall Connection Boxes, 3rd party equipment can be connected to the FlexVision Omniswitch.
- Snapshot
 - o The snapshot function allows the user to store/save a screen-capture of any image on the 56" 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 Room as separate DICOM Secondary Capture images. The FlexVision XL can be mounted on a 3 party MCS. This gives the possibility to be more flexible in the positioning of the FlexVision XL in the exam room. This is often requested in Hybrid OR's

9 **NCVA825 Stentboost subtract 1

The StentBoost Subtract improves the visualization of devices in the coronary arteries during interventions. Before and after the deployment of the devices such balloons and stents the position can be checked and stent expansion can be confirmed in the coronary lumen lumen and clear relation of the stent placement to the vessel walls. The StentBoost package enables physician to take any corrective action required immediately, while the catheter is still in place. StentBoost automatically detects the stent delivery markers image after image. In each image StentBoost aligns the markers with the markers of the previous image. StentBoost can be used with and without contrast. Without contrast the images are acquired with only a short cine run of 1 to 2 sec (recommended with 40 frames out) to show all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced stent visualization. With contrast the images are acquired with a tcine run of 5 to 6 sec. Contrast media is required only for the last 3 to 5 sec (typical recommendation of total 100 frames which of 100 frames cine run of which last 60 frames are with contrast) to show all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced stent visualization. StentBoost automatically detects the stent delivery markers image after image. In each image StentBoost aligns the markers with the markers of the previous image. By doing this all radiopaque material in the close proximity of the markers will be enhanced resulting in enhanced

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stent visualization. A contrast enhanced image run results in a dynamic representation of the enhanced stent in relation with the vessel wall.

The Stentboost package functionality includes, but is not limited to:

- Pre-defined Region of Interest to indicate the location of the stent/balloon markers.
- Real time link for immediate data transfer.
- Manual correction possibility for marker identification
- Review of StentBoost runs, before and after processing
- Measurements to supports decision-making in determining the percentage of remaining in the stent.
- Store image snapshot.
- Automatic pre-defined Region of Interest to indicate the location of the stent/balloon markers.
- Fading in/out of contrast vessel and StentBoost image.
- Viewing selection of StentBoost with and without contrast,
- Manual image contrast and brightness adjustment of the boost and contrast image
- Manual correction possibility for marker, boost and contrast identification.
- Create and store as movie.

StentBoost includes the following export functionality:

- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC.
- 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 removable memory device.
- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Image transfer to any PC in a standard PC compatible format (JPEG,AVI)
- Image transfer to any DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
- Image transfer to any PC in a standard PC compatible format (JPEG,AVI)

10	**NCVA614	Monoplane LCD support for control room	1		
		Display support to increase display hight and create storage volume to put away keyboard, mouse and cabling			

11	**NCVA788	MultiSwitch.	1		
		MultiSwitch/Xper Window Switch			

MultiSwitch is an option that provides the ability to share the Xper workspot in the Control Room with other applications that are loaded on separate PC modalities.

The MultiSwitch option allows switching of the (colour LCD) data monitor, keyboard and mouse, normally connected to the Allura Xper system, to a separate PC modality.

Thus saving significant space in the control room as only one monitor and keyboard is used for multiple applications.

Applications that are loaded on this PC modality, will run independantly of the Allura Xper system, operated from the Xper workspot in the control room. Obvious example PC applications from PMS are Xcelera, Xcelera CLM, 3D RA, StentBoost, Viewforum.

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In addition to the Allura Xper system, up to three separate PC modalities can be connected to MultiSwitch. If these PC modalities are also connected to an Ethernet Network, the ethernet connection will also be switched by MultiSwitch.

The requirements of the PC modality that is connected to MultiSwitch, and the applicable applications are:

- maximum resolution for the colour LCD display: 1280*1024 VGA
- PS/2 keyboard- and mouse interface
- complies with UL60950 regulations and EMC level A

The maximum power supply requirement for three PC modalities (incl accessories) in total should not exceed 1400 Watts@230 VAC.

The MultiSwitch option comprises:

- KVM Switch box (4 inputs, 1 output)
- Ethernet switch (3 inputs, one output)
- 5 ea cable sets for keyboard, mouse and VGA
- 3 ea power cables for the PC modalities and one power cable for the ethernet switch
- 4 ea ethernet cables

The Xper Window Switch is an option that provides the ability to integrate networked functionality in the Control Room of the Allura Xper Flat Detector system. The Xper window switch provides the possibility to switch to CIS/RIS applications that are available on the network and are basically data-only oriented.

Xper Window Switch to any RIS/CIS

The Control Room workspot can be switched to the hospitals' Cardiology/Radiology Information System. Only the user-interface devices Data Monitor, Keyboard, and mouse are switched via standard available solutions: "X-window", and "HTML browser" to become a standard UI for the RIS/CIS system.

This option is a software key which enables the specific Xper switch functionality for only the applications, which are available on site.

Compatible with:

- . Allura Xper FD10 R.3
- . Allura Xper FD10/10 R.2

12	**NCVA089	RIS / CIS DICOM interface	1	
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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:

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- 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 ortosearch fora 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
- 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

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- 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.

13	**NCVA092	Lab Reporting	1		
		Lab Reporting allows the user to generate and print simple reports in modality stand-alone situations. The user is able to incorporate free text and clinical images. The reporting functionality is suited for local printing and email. Part of the report is generated automatically from administrative data (e.g. patient/exam data hospital name) and required data (e.g. run-log dose information and event-log).			
14	**NCVA781	Dicom Print compose	1		
		Dicom Print provides the possibility to interface to any DICOM Printer. This is an automated printing protocol. The option provides Print Manual Overrides, Print Job submission, and Print Job management.			
15	**NCVB879	Aut Pos Contr Xper sys & table	1		
		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.			
16	**NCVA695	FD Rotational Angio	1		
		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.			

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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.

17	**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.

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.

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.

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Line #	Part #	Description	Qty	Each	Price
		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.			
		Comprising:			
		<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) 			
18	**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.			
19	**NCVA693	FD Dual Fluoro	1		
		Dual Fluoro for Flat detector systems			
		The Dual Fluoroscopy mode allows digitally processed fluoroscopy in parallel with trace subtract fluoroscopy, providing a non subtracted reference fluoro image for complex interventions.			
		This option provides an additional fluoro channel in parallel to the default fluoro channel. The Dual fluoroscopy mode is selected via the Xper module.			
		The trace subtracted fluoro image will be displayed on the exam monitor, the non-subtracted fluoro image is displayed on the reference monitor.			
		In Dual Fluoro mode, The fluoroscopy image on the exam monitor can be zoomed digitally with a factor 2, providing a larger view of the region of interest for complex interventions. The fluoro zoom function is controlled via the Xper module.			
20	**NCVA672	FD SmartMask	1		
		SmartMask simplifies roadmapping procedures by overlaying a selected reference image with fluoroscopy on the live monitor in the exam room.			
		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.			
		SmartMask facilitates pre- and post- intervention comparisons to assess treatment results			
21	**NCVA121	FULL AUTOCAL	1		
		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:			
		<ul style="list-style-type: none"> • 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 			
22	**NCVA785	Coronary Quant.Sw pkg(Xper)	1		

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Line #	Part #	Description	Qty	Each	Price
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Functions:

- diameter measurement along the selected segment
- cross sectional area
- %-stenosis
- pressure gradient values
- stenotic flow reserve
- 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.

Comprising:

- software license

Compatible with:

- . Allura Xper FD 10 Rel 3 and FD10/10 Rel 2 onwards
- . Allura Xper FD20 Rel 2, FD20/10 Rel 2 onwards

23	**NCVA786	Vascular Quant.Sw pkg(Xper)	1		
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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.

Compatible with:

- Allura Xper FD10 Rel 3 and FD10/10 Rel 2 onwards
- Allura Xper FD20 Rel 2 and FD20/10 Rel 2 onwards
- Allura CV20 R1 onwards

24	**NCVC199	Wireless footswitch: mono-plane version	1		
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The wireless footswitch is an option for our Allura systems. It provides the possibility to have one wireless footswitch in the exam room.

A wireless footswitch provides workflow optimization, flexibility at table-side, removes cable clutter on the floor and provides easier cleaning of the footswitch.

The mono-plane wireless footswitch is a 3 pedal version; one pedal for fluoroscopy, one for exposure and one to control the roomlight/single shot. 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.

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Set of flexible x-ray filters to provide an uniform density in angiographic examinations of the lower peripheral area.

Comprising:

- one central filter, at the top edge provided with sizing markers at every 5 cm, length : 1 m
- two side filters, length: 1 m

30	**NCVA783	Pivot for table base.	1		
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For angiographic- and interventional procedures of the upper peripherals.

Provides improved table access for patient transfer.

Allows pivoting of the table base around its vertical axes.

Pivot range from -90 degrees to + 180 degrees (or -180 to +90 degrees) with locked positions on 0, -13/+13 (facilitating arm-angiography) and -90/+90 and 180 degrees.

Comprising:

- pivot device with graduated scale to be mounted on the universal floor plate of the table.

Compatible with Xper Table

31	**NCVA791	Xper Table Tilt	1		
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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.

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.

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`

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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

32	**NCVB882	Cradle extension	1		
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This extension provides the possibility to cradle the table top.
 This allows optimal positioning of the patient for f.i. more invasive (surgical) or guided puncture procedures.
 Functionality:
 . isocentric cradle with maximum cradle range: -15 degrees to +15 degrees for the full tilt range
 cradle speed: 3 degrees/sec
 . automatic safeguarding system with manual override
 . easy to use controls

33	**NCVB199	Table top brake kit for the Xper Table	1		
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The table top brake kit prevents the table top from floating in case of a power off situation.
 A friction brake is applied to stop the longitudinal and lateral movement of the table top.

34	**FCV0257	Dripstand	2		
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Drip stand for hanging fluid bags

35	**FCV0272	Neuro Wedge	1		
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The neuro wedge is used to obtain optimal iso center position of the head during neuro-radiology examinations.

36	**FCV0513	Add. OP rail (US version)	3		
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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 standard US dimensions for operating room accessories.

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)

37	**NCVB878	Interventional Tools Hardware	1		
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The interventional tools hardware is the computer that enables the 3D interventional tools, it allows to import and view DICOM compatible data from other imaging modalities The interventional Hardware comprises at least a Harddisk containing operating system and application software.

38	**NCVA590	Real time image link	1		
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Real Time digital image link to an off-line Allura Interventional Hardware station. This applies on the applications 3D-RA, StentBoost and 3D-CA on the Interventional Hardware. This dedicated digital link sends raw or processed image data (depending on the application) real time during monoplane exposures to the connected Interventional Hardware station, to allow instant results of the applicable reconstruction after the exposure run.

In biplane systems, this digital link is available for the frontal channel only.

39	**NCVA116	3D RA Control for Xper Module	1		
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Table Side Module functionality for Allura Xper FD20 used with Integris 3D-RA Release 4.2.

For further improvement of interventional procedures efficiency the following workflow enhancers are made available in the examination room: With the Xper touchscreen module the physician has all 3D functionality needed at tableside. Functionality like rotating panning zooming AVA Virtual stenting 3 and 3D Follow C-arc can be performed. No need for the Physician to leave the examination room. 3D Automatic Position Control (3D-APC); when the optimal working position has been chosen via the Integris 3D-RA interventional tool the C-arc will automatically steer to this position. 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.

40	**NCVB168	3D Roadmap	1		
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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 fluoroscopy 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. 3D roadmap has automatic motion compensation for the neuro runs. When the automatic motion compensation function is active, this functionality will constantly correct the motion artifacts which can be present in the 3D Roadmap image.

Image Acquisition

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 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.

Intuitive, fully controlled from tableside:

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

- 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.

3D Roadmaps 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)

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Line #	Part #	Description	Qty	Each	Price
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And stored/archieved 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 archiving
 Hard copy via the (DICOM Print) protocol

41	**NCVB167	MR/CT Roadmap	1		
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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. The MR/CT Roadmap option matches the real-time 2D fluoroscopy images with the 3D volume of CT or MR.

The CT or MR data can visualize in either 3D (e.g vascular structure) or with 2D slice in the same orientation as the 2D fluoro image. It provides a 3D real time insight of the advancement of the guide wire, catheter and coils through complex vessel and anatomical structures

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 (Xper Module). Select the MR/CT Roadmap function on the touch screen module, activate fluoroscopy and the MR/CT Roadmap is activated. 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 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 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 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 Roadmaps 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).

And stored/archieved 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 archiving.
- Hard copy via the (DICOM Print) protocol.

42	**NCVA879	Xper CT R2	1		
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100215 Allura Xper FD20

Line #	Part #	Description	Qty	Each	Price
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XperCT extends the capabilities of the angio system offering CT like imaging. The XperCT acquisition scan acquires up to 620 images. The 620 images ensure a high quality reconstruction of a CT-like volume to visualise soft tissue.

XperCT includes frame rate extension to increase the system acquisition speed up to 60 frames per second. The high frame rates are beneficial for the dedicated abdomen protocols: fast acquisitions times in 5 or 10 seconds.

The XperCT imaging process is fully automated in the Xper system. The XperCT 3D volume is displayed automatically within 1 minute (from acquisition to display): no user interaction required. Especially in critical cases it is important to obtain a fast overview.

The 3D volume can be viewed in the control room and in the examination room. The slice view is performed by scrolling through the volume. Slice thickness and ww/wl can be varied upon user need. XperCT can be controlled via the Xper 3D module at tableside.

In addition the XperCT volume can be matched with Allura 3D-RA. This view combines soft tissue information with high-resolution vessel information. The optimal view can be chosen with the orientation of the 3D volume: the C-arc follows automatically.

Pre-requisite:

- Interventional HardWare
- Real Time Link
- FD Rotational Angio
- Frame rate extension

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

43	**NCVB845	XperGuide Rel 2 SW	1	
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XperGuide enables real-time needle guidance in the angio suite. Virtual needle paths are created on an XperCT dataset or on the previous acquired CT or MR dataset. XperGuide option matches the real-time 2D fluoroscopy images with the 3D volume of XperCT, CT or MR; to visualize the actual needle path versus the virtual path previously planned.

This volumetric dataset can be viewed in any slice direction. A wide range of gantry projections can be used to define the needle path.

Path planning can be done:

- By drawing a virtual needle path on an XperCT, MR or CT slice
- By defining entry and target points on different XperCT, MR or CT slices
- By defining a help line on a 3D volume XperGuide automatically calculates the optimal gantry projections for the path and transfers them to the planning to draw the needle path.

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Line #	Part #	Description	Qty	Each	Price
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The calculated virtual needle paths can be viewed on the XperCT, MR or CT slices, to verify if this path is feasible. XperGuide supports planning of multiple needle trajectories. During the needle procedure, XperGuide is fully controlled at tableside. When XperGuide is active, guidance is automatically active when the fluoro pedal is pressed. The live 2D image is projected over the XperCT, MR or CT volume. The gantry can be positioned in the calculated gantry positions or controlled manually. The XperGuide images (live 2D fluoro projected over the XperCT, MR or CT volume) will follow the gantry projections.

At table side, XperGuide adapts in real-time to the following parameters:

- Changes in the angulation of the C-arm
- Changes in the rotation of the C-arm
- Changes in the field of view
- Changes in the source image distance

XperGuide run are in the same patient file as all other patient related data. All this data can be reviewed at any time.

XperGuide runs are stored together with the XperGuide movies and snapshots 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)

And stored/archieved 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 archiving
- Hard copy via the (DICOM Print) protocol

Clinical Education Program for XperGuide

CV XperGuide 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 # 336-100316

44	**NCVB846	Laser Option	1	
Xperguide Laser tool				

The XperGuide laser tool is a positioning aid. It is attached to the patienttable for use during percutaneous interventional procedures. The laser tool marks the needle entry point on the skin, and assists with holding the needle in the correct position and orientation.

Using the laser tool with XperGuide allows you to concentrate on the Progress View without

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Line #	Part #	Description	Qty	Each	Price
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needing to switch back to the Entry View. The laser tool has an LED to indicate its status: when the LED is lit, the laser is active.

Laser tool components

- Laser tool
- Laser tool holder and table clamp for fixation to the patient table
- Laser tool charger

45	**FCV0569	Coupling to Video Switching	1		
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Coupling to Video Switching

A video splitter box is provided to enable coupling a maximum of 4 color outputs (e.g. Interventional tools, Xcelera, XperIM and Viewforum) to the switching concept from our partner.

! For each color output that is coupled to the splitter box, one wall connection box becomes redundant.

46	**NCVB641	VasoCT	1		
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VasoCT is a unique interventional tool for ischemic stroke intervention, based on intra-venous contrast injection, which visualizes location, length and size of occlusion in the brain vessels by showing the vessel structure beyond the clot. Images with the traditional intra arterial injection only visualize the vessels up to the clot.

Next to this VasoCT gives indication in what direction to navigate to and through the occlusion. In this way VasoCT enables faster and more accurate treatment of Stroke patients in the interventional X-ray lab.

VasoCT will be an option that can be ordered in combination with initial FD20 systems with Xtravision R8 and higher.

VasoCT is also available as upgrade for Release 7 based systems.

Upgrade package is available for FD20 systems with the following specifications:

- Release 7.2.1/7.2.3/7.2.4 or Release 7.6
- XperCT license
- Xtravision R8 and higher
- RTO (Real Time Output)

The VasoCT package contains everything that is needed for to perform VasoCT imaging such as:

- Software to install EPX + VasoCT buttons on Xper Module
- Injection protocols
- Instruction video
- Instructions for Use

47	**FCV0563	Personal Dose Meter (1 piece)	8		
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Line #	Part #	Description	Qty	Each	Price
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Personal Dose Meter.
 The Personal Dose Meter (PDM) is a small and easy to wear active Xray dose meter intended to measure and store received Xray dose of staff, present in an Xray room during radiation. The PDM has build-in wireless communication to connect to the DoseAware Base Station for real time dose-rate indication and has a long battery life for maintenance-free usage. In addition it can be personalized to increase interest and awareness. The PDM not only records warning level profiles every second for a total of 3600 sec (cyclic overwritten), but also stores accumulated dose data every hour for maximum 5 years. A clip and a lanyard holder are included to facilitate easy wearing.

The PDM can be configured via the cradle and DoseView (and the optional Dose Manager) software for the following attributes:

- Full name (max 40 bytes)
- Display user name (max 16 bytes)
- User group from list
- PDM ID (max 16 characters)
- Position on body
- Date & time = Real Time Clock, synchronized with local time, and being the clock master for the DoseAware system. With each connection PDM => Base Station => Dose Manager the timing is synchronized automatically.
- Date of PDM assignment to a person
- Dose history reset
- Sleep mode On/Off
- Annual dose limit

The PDM has following specifications:

- Operational unit: HP10
- Dose range: 1 μ Sv – 10 Sv
- Dose resolution: 1 μ Sv
- Dose uncertainty: 5% or 1 μ Sv
- Dose rate range: 10 μ Sv/hr - 50 mSv/hr
(3 nSv/s - 15 μ Sv/s)
- Response time: < 4 s, 40 μ Sv/hr – 100 μ Sv/hr; < 1 s above 100 μ Sv/hr
- Energy dependency X-, Gamma-rays: N40-N160 (33keV – 118 keV)
- Average battery life: 3 – 5 years, depending on daily use
- Weight: 30 gr
- Dimensions: 45 x 45 x 10 mm (w x h x d)
- Personalization: 8 inlays with colour
- Communication radio: Center frequency 868.3 Mhz for Europe version
915 Mhz for USA version

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Line #	Part #	Description	Qty	Each	Price
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DoseAware Xtend is an unique solution providing staff working in an X-Ray environment with direct, real time dose feedback, enabling them to pro-actively optimize their behavior and reduce exposure to scattered dose. The DoseAware Xtend is a complete package and comprises off:

- 1 DoseAware Xtend package (including a reference PDM holder, a radio hub, cables and other items to connect with the Allura FlexVision , ...)
- 3 PDMs (one of these to be used as reference PDM)
- 1 PDM rack.

DoseAware Xtend

The DoseAware Xtend system contributes to long-term dose reduction of people who work with or are in the presence of x-ray imaging equipment. This is done by measuring and presenting individual dose exposure in real time for any Personal Dose Meter (PDM) in range when x-ray is used. Based on this information the individual can understand, act and change behavior to reduce the received dose.

The DoseAware Xtend combines individual dose information from the PDM with modality procedure data from the Allura and integrates this into real time feedback.

DoseAware Xtend product benefits:

- The DoseAware Xtend screen will be displayed on the FlexVision monitor, which allows for flexible real-time display close to live view or any other preferred position
- Smarter read out with dose aware data per procedure by sharing information from the Allura:
 - o An advisory when user is advised to take more radiation protection measures, like using lead curtain or lead shielding between themselves and the X-ray Tube
 - o Accumulative dose data per procedure
 - o A relative value as behavior indicator (Relative dose in %) per procedure (normalized data by reference PDM on C-Arm)
- Automatic operator dose reporting by email (per lab or per PDM) and
- Archiving by DICOM data (RDSR)

The PDM dose information is stored within the Hub. Dose data on procedure level will be send automatically by email. Dose data by second can be retrieved by the Dose Manager software (optional) via a standard network interface.

The DoseAware Xtend package includes also:

- a cradle and the DoseView software package that can be installed on a local PC (not included), which has Windows XP, Vista or Windows 7 as operating system.
- A radio hub for the radio communication with the PDM's
- All items (including wall connection box) to integrate the DoseAware Xtend with your Allura FlexVision.

3 Personal Dose Meters

The Personal Dose Meter (PDM) is a small and easy to wear active X-ray dose meter intended to measure and store received X-ray dose of staff, present in an X-ray room during radiation. The PDM has build-in radio-frequency wireless communication (915 Mhz for USA version, 952,4 MHz for Japan version, 868.3 Mhz for ROW version,) to connect to the DoseAware hub for real time dose-rate indication and has a long battery life for maintenance-free usage. In addition it can be personalized to increase interest and awareness. The PDM not only records warning level profiles every second for a total of 3600 sec (cyclic overwritten), but also stores accumulated dose data every hour for maximum 5 years.

The PDM can be configured via the cradle and DoseView or Dose Manager Software.

The DoseAware Xtend package includes 3 PDM's. One of these PDM's will be used as reference PDM placed in the holder on the C-arc.

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Line #	Part #	Description	Qty	Each	Price
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Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced.

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

50	**989801292278	IXR Additional Training 28 Hours OnSite	2		
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Clinical Education Specialists will provide twenty-eight (28) hours of CV OnSite 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: 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 the earlier of equipment delivery date or purchase date.

51	**989801292383	Vasc Interventional Tools OffSite 20h	2		
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A Philips Clinical Instructor will provide 20 hours (2.5 days) of in-depth didactic, tutorial and hands on training covering the Vascular Interventional Tools used in conjunction with the FD system. This course is designed to provide basic functionality, workflow and application knowledge necessary to fully utilize the Vascular Interventional Tools programs. Due to software release levels, the software used for training may slightly differ from software used at the trainee's facility. This course is highly recommended and will compliment your standard On-site training for Vascular Interventional Tools.

This 20 hour course is located in Cleveland, Ohio at the Cleveland Training Center. Due to program updates, the number of class hours is subject to change without notice. The customer will be notified of current total class hours at time of registration. CEU credits may be awarded if the participant meets the ASRT guidelines. **Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292445 (CV Partial Week Travel Pkg Offsite) is purchased.**

52	**989801292445	CV 16h to 20h Travel Pkg OffSite	2		
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Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced.

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

53	**989801292757	iXR Addl Case Support OnSite Educ 8 Hours	1		
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Line #	Part #	Description	Qty	Each	Price
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Philips Education specialist will provide eight (8) hours of on-site education for up to (4) students as selected by the customer . The Physicians performing the procedures are required to be part of the training session. CEU credits may be available for each participant that meet 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 the equipment during the educations sessions except to demonstrate proper equipment operation.

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

54	**980406041009	Rad Shield w/ Arm (Contoured) 61X76	1		
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Contoured Rad Shield with Arm rest. 61X76

55	**980406190009	PIVOTING TABLE-MOUNTED RADIATION SHIELD	1		
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Table-mounted radiation shield for additional protection of physician and staff against scatter radiation. The shield consists of two protective parts: a lower shield and an upper shield. The shield is specially designed for use with the AD5 patient table.

The table mounted radiation shield provides the following features:

- Mounting to either the right or left table accessory rails;
- Pivoting into the required working position;
- Pivoting into the parking underneath the tabletop facilitating patient preparation;
- The upper shield can be positioned upright providing optimal protection or can be folded down for free access to the patient.

The table mounted radiation shield includes:

- Lower shield measuring 70 cm high 80 cm wide 0.5 mm Pbequivalence;
- Upper shield measuring 40 cm high 50 cm wide 0.5 mm Pbequivalence;
- Mounting clamp;

Docking device for wall mounting.

56	**989801220080	Portegra 2 360 Ceiling Column	1		
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Portegra 2 360 Column w/ trolley and ceiling track

57	**989801220084	Volcano Joystick Option Kit	1		
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A compact joystick that comes with a clamp to be mounted on the patient bedrails. Some physicians prefer to control the IVUS system via a joystick, and this option provides this functionality. Can be operated under the sterile drape.

58	**989801220089	Volcano Witt ECG Cable Kit	1		
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The VH IVUS functionality from Volcano requires an input signal from the labs ECG signal. This custom connector ensures connectivity for the ECG signal from a specific ECG system. NOTE: Every s5i installation will require an ECG connection. Note the labs ECG system when ordering.

59	**989801220093	Volcano IVUS s5i	1		
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Line #	Part #	Description	Qty	Each	Price
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- Flow Rate 0.1-45.0 ml/s in 0.1 ml increments
- 0.1-59.9 ml/m in 0.1 ml increments
- Volume 1-150 ml in 1 ml increments
- Pressure Limit 100-1200 psi in 1 psi increments
- (150ml syringe) 689-8273 kPa in 1 kPa increments
- Rise Time 0.0-9.9 seconds in 0.1 increments
- Delay Time 0.0-99.9 seconds in 0.1 increments
- Fill Speed 1-20 ml/s
- Fill Volume 1-150 ml
- Syringe Size 150 ml
- Syringe Heat Maintainer 35 °C (95 °F) ± 5 °C (9 °F)
- Protocol Memory 40 Protocols
- Injection Memory History

62 **NNAE391 FlexVision XL 8 Input Package 1

The FlexVision XL8 input package provides eight isolated wall connection boxes and eight legacy converters.

Isolated Wall Connection Box

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.

The quantity of the VWCB's has to be calculated as follows:

For each video signal to FlexVision XL on Vascular System: 8 VWCB

Note:

No VWCB is required in case a video signal is connected directly to a dedicated LCD from the following sources:

- 1) Xper Live/ref Slaving
- 2) Interventional HW (XtraVision), ViewForum, Xcelera (only if workstations are powered by Allura Xper)
- 3) Xper IM

Legacy Video Convertor

The Legacy Video Convertor enables conversion from VGA towards DVI for supported input resolutions as listed in the table below.

Signal type Native resolution Image Aspect Ratio

- VGA 640x480 4:3
- SVGA 800x600 4:3
- XGA 1024x768 4:3
- SXGA 1280x1024 5:4
- SXGA+ 1400x1050 4:3
- UXGA 1600x1200 4:3
- WXGA 1280x800 16:10 (8:5)
- WSXGA 1440x900 16:10 (8:5)
- WSXGA+ 1680x1050 16:10 (8:5)
- WUXGA 1920x1200 16:10 (8:5)
- 2K 2048x1080 19:10
- TV1080I/P 1920x1080 16:9
- TV 480I 720x480 4:3
- TV 480P 704x480 4:3

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Line #	Part #	Description	Qty	Each	Price
63	SP059B	Universal Power Supply 25 kVP Universal Power Supply (UPS)	1		

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OPTIONS

Line #	Part #	Description	Qty	Each	Price	Initial
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1	**989801292755	TAVR Physician Hands-On Imaging Course	1			
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This course covers all of the theory and practical applications of MDCT and ECHO, from screening to long-term assessment of patients undergoing TAVR. The course will alternate hands-on workstation interpretation of cases with didactic materials and videotaped/narrated implantation procedures. There are 4 hours pre-course didactics, 6 hours live hands-on training, 10 practice cases with Mentor (computerized self-scoring) system and post-course lectures, plus course book. All students will have ongoing access to a TAVR imaging web community that provides ongoing education, science news, tips and tricks, and notices of advancements in the field. In total, the trainee will interpret 25 cases during the class. The didactic portions will be delivered by expert physicians. The course is approved for 18 CME hours.

Program updates, course dates/times, location and topics are subject to change without notice and will be confirmed at time of scheduling. Attendees will receive updated information regarding schedule changes. This quote covers tuition costs for one (1) person. Travel, lodging and transportation are the responsibility of the attendee.

Cancellation Policy Course:

Cancellations made in writing 60 days prior to the first day of the course will be refunded less a \$300 administrative fee. Cancellations made in writing between 30 and 60 days prior to the first day of the course will be subject to a 50% cancellation fee. No refunds will be given less than 30 days prior to the first day of the course. No telephone cancellations will be accepted. In the unlikely event that the course is cancelled by the training site, the site will refund the registration fee, but is not responsible for any travel costs. Attendee is responsible for any cancellation fee incurred.

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

2	**989801292756	TAVR Nurse/Tech Hands-On Imaging Course	1			
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This course covers all of the theory and practical applications of MDCT and ECHO, from screening to long-term assessment of patients undergoing TAVR. The course will alternate hands-on workstation interpretation of cases with didactic materials and videotaped/narrated implantation procedures. There are 4 hours pre-course didactics, 6 hours live hands-on training, 10 practice cases with Mentor (computerized self-scoring) system and post-course lectures, plus course book. All students will have ongoing access to a TAVR imaging web community that provides ongoing education, science news, tips and tricks, and notices of advancements in the field. In total, the trainee will interpret 25 cases during the class. The didactic portions will be delivered by expert physicians. The course is approved for 18 CME hours.

Program updates, course dates/times, location and topics are subject to change without notice and will be confirmed at time of scheduling. Attendees will receive updated information regarding schedule changes. This quote covers tuition costs for one (1) person. Travel, lodging and transportation are the responsibility of the attendee.

Cancellation Policy Course:

Cancellations made in writing 60 days prior to the first day of the course will be refunded less a \$300 administrative fee. Cancellations made in writing between 30 and 60 days prior to the first

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OPTIONS

Line #	Part #	Description	Qty	Each	Price	Initial
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day of the course will be subject to a 50% cancellation fee. No refunds will be given less than 30 days prior to the first day of the course. No telephone cancellations will be accepted. In the unlikely event that the course is cancelled by the training site, the site will refund the registration fee, but is not responsible for any travel costs. Attendee is responsible for any cancellation fee incurred.

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

3	**989801299678	Airfare to Cleveland for Biomed Training	1			
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Includes one (1) participant's airfare from North American customer location to the Cleveland Training Center (CTC) in Cleveland, Ohio. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Expires one (1) year from the earlier of equipment delivery date or purchase date.

4	**989801299679	Food Transpt Lodging for Cleveland Biomed Training	9			
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Includes one (1) day of modest lodging, ground transportation, and meal expenses in Cleveland, Ohio for one (1) attendee. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Although this part is only for one day, it is sold in multiple quantities to account for entire length of course. Expires one (1) year from the earlier of equipment delivery date or purchase date.

5	**989801299729	XD3970ALLURAFD7.6PART1C TC9	1			
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Course Number: XD3970
 System Codes: 722010, 722011, 722012, 722013
 Course Title: Allura Xper Rel 7.6 Part 1
 Course Length: 9 days (exclude Saturday, Sunday, and Philips holiday)
 Delivery Method(s): Instructor-Led
 Modality: iXR
 Location: PHC, SLC, CTC
 Target Audience: Service Engineers.

DESCRIPTION:
 Part 1 trains the Customer Support engineer to a technical level which will enable him/her to perform Planned Maintenance (PM) and basic Corrective Maintenance (CM) on Allura Xper systems, according to the Customer Support philosophy. He / She will also be able to assist during a system installation.
 Part 1 can be followed up by part 2, intended for dedicated Cardio Vascular modality Engineers. Part 2 focuses on setting to work (configuration) and extended Corrective Maintenance. The following Allura Xper systems are covered:
 FD10 release 7.6
 FD10/10 release 7.6
 FD20 release 7.6
 FD20/10 release 7.6
 FD20/20 release 7.6

100215 Allura Xper FD20

OPTIONS

Line #	Part #	Description	Qty	Each	Price	Initial
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PREREQUISITES:

CS9020 BASIC NETWORKING

XC3002 X-RAY SYSTEMS BASIC PART 2

COURSE OBJECTIVES:

The engineer will learn how to:

- Operate the system, as far as required to perform service tasks.
- Make use of the service documentation.
- Make use of basic functionality of the service tools.
- Perform Planned Maintenance:
 - Safety checks
 - Performance checks
 - Adjustments
- (Not included: Mechanical checks)
- Create a backup of the system.
- Perform a restore of the system.
- Perform basic CM with help of the service documentation and service tools.
 - Faultfinding using the System Manual Corrective Maintenance.
 - Focus on replacement of parts with a high exchange rate.
 - Retrieve the log file from the system to escalate a problem.
- Customize positions for Automatic Position Control in the EPX-database.

MAJOR TOPICS:

Introduction Allura Xper systems

Operating

Service documentation

Service tools

Planned Maintenance

Corrective Maintenance

System Architecture

X-ray generation

Geometry

Operator controls

Power supply

Imaging

System control

Radiation safety

Image quality

Customization

Software

Course dates and location to be finalized by Philips. Philips 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 Philips.

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OPTIONS

Line #	Part #	Description	Qty	Each	Price	Initial
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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

6	**989801299743	XD3974ALLURAXPERREL7.6P ART2CTC9	1			
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Course Number: XD3974
System Codes: 722010, 722011, 722012, 722013
Course Title: Allura Xper Rel 7.6 Part 2
Course Length: 9 days
Delivery Method(s): Instructor-Led
Modality: iXR
Location: PHC, SLC
Target Audience: Service Engineers.

DESCRIPTION:

This course is a follow up on the Allura Xper Part 1 course and is intended for modality Engineers that specialize in Cardio Vascular.

3 months Field experience on Allura Xper systems is strongly recommended before attending this part 2 course, this means the engineer has done some installation, pm- and cm visits.

In part 2 the customer support engineer is trained to a technical level which will enable him/her to perform setting to work and extended corrective maintenance on Allura Xper systems, according the customer support philosophy.

Not covered are the Mechanical Installation and Cabling of the Allura Xper System.
These topics are covered in the e-learning: Allura Xper Mechanical Installation.

The following Allura Xper systems are covered:

- FD10 release 7.6
- FD10/10 release 7.6
- FD20 release 7.6
- FD20/10 release 7.6
- FD20/20 release 7.6

PREREQUISITES:

- XD3866 or XD3966 or XD3970

COURSE OBJECTIVES:

For Allura Xper systems, the engineer will learn how to:

Perform the setting to work, including:

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OPTIONS

Line #	Part #	Description	Qty	Each	Price	Initial
		Setting to work of Dicom Store and Storage Commit from Allura towards an Xcelera PACS as well as Setting To Work of the CWIS option towards an Xcelera and/or Hemodynamic system Xper Flex Cardio. Customizing of common parameters of the Xper database. Distinguish technical problems from incorrect operating. Perform extended corrective maintenance; with help of analytical trouble shooting, service documentation and service tools. Perform a Dicom traffic capture file, with help of the DVTK program (Dicom Network Analyzer), as part of the connectivity Fault Isolation Procedure for analyzing and if needed sending to helpdesk Image quality faultfinding using lower level IQ measurements.				

100751 Xper Flex Cardio

Line #	Part #	Description	Qty	Each	Price
1	**P_860335_PL1	Xper Flex Cardio Control Room	1		

Xper Flex Cardio Control Room configuration is a physiomonitring/hemodynamic system that is optimized for the cath lab environment. The system allows for monitoring the patient's vital signs as well as allows for hemodynamic measurements required during interventional procedures. This Control Room configuration consists of a signal acquisition unit that is installed within the procedure room and a computer workstation in the x-ray control room. This configuration is typically used within the cath lab, hybrid OR and multi-purpose labs where cardiac monitoring is required. User logins allow for networking to a central database server for archival of case procedure information. The system outputs the monitored signals to a boom display within the procedure room, while dual LCDs displays connected to the control room workstation can be used for all of the hemodynamic and information management functionality.

Software Features:

- Physiomonitring, manual or automated entry of patient information in case details, sampling of waveforms, charting, hemodynamics
- Non-clinical functionality available via Xper Information Management modules loaded on the control room workstation

Xper Information Management modules included:

- Hemodynamic control software
- Charting for case procedure documentation
- Hemodynamic calculations
- Vitals capture
- Scheduler

Optional Features:

- FFR Measurement for Volcano or St. Jude
- End Tidal CO2 (Side Stream and/or Main Stream)
- 16 Lead ECG
- ECG Analysis using Philips DXL Algorithm

Optional Modules:

- Xper IM Documentation Workflow Modules
- Xper IM Registries
- Xper IM Patient Status Viewer

Minimum Hardware included:

- Flex Cardio device (Model FC2010)
- Workstation
- Dual LCD Displays
- Keyboard
- Mouse
- Patient cable kit

Minimum Software included:

- Microsoft Windows 7 or greater

100751 Xper Flex Cardio

Line #	Part #	Description	Qty	Each	Price
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- Current version of Xper IM software for workstation
- PC Anywhere v12.5 or greater
- McAfee Antivirus

Monitoring functionality included:

- NIBP
- Respiration
- Temperature
- 12-lead ECG
- SpO2
- Cardiac output (Thermodilution)
- Invasive pressures (4 channels)

Requires purchase of:

- Xper IM Data Center SW
- Table Mount
- 4:3 LCD HQ Display

NOTE:

- Pressure transducers, or adapter cables, are not included.
- Contact: Fogg System Company
- USA: 1-800-525-0292
- <http://www.foggsystem.com/>

2	**P_860335_SF1	Side Stream ETCO2	1		
	Incorporates Side Stream End Tidal CO2 monitoring capabilities to Xper Flex Cardio devices via external Philips Sidestream cable (M2741A)				

- Monitoring accomplished via nasal canula.

Include:

- One box (10 each) disposable Adult CO2/O2 Nasal Canulas (M2750A)
- One box (10 each) disposable Pediatric CO2/O2 Nasal Canulas (M2751A)

3	**P_860336_CS1	Xper IM Concurrent User License	1		
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An additional concurrent user license provides floating access to interact with a single server. While the quantity of clients is uncontrolled, the total number of concurrent user licenses available determines the maximum amount of simultaneous users on the network at any moment in time.

- Allows access to all purchased Xper Information Management workflow modules at networked workstations
- Hospital to provide network card(s), hub ports, cable to node(s), and implement installation of hardware

Requires:

- Client Workstation HW
- Data Center SW

4	**P_860336_CU4	Total Number Xper Concurrent User Licenses	2		
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The quantity shown for this item indicates the TOTAL number of Concurrent Users customer would have after purchasing additional licenses offered within this proposal.

This total is derived by taking into account any existing concurrent users licenses the customer currently owns, and adding that number to the quantity being offered under a separate line item. For this reason the TOTAL number may be more than the quantity offered herein.

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Line #	Part #	Description	Qty	Each	Price
		<ul style="list-style-type: none"> - File Server - Main Board - Dual Quad Core 3.16 GHz or greater processor - 32 GB RAM - RAID 5 or greater - DVD-ROM Drive - 4 TB Storage Space - Video – 1280 x 1024 res, 24/32 bit color Min - 10/100/1000 Network Adapter (2) -Microsoft Windows Server Operating System -Microsoft SQL Server Software -Symantec pcAnywhere -Rack in which to place Server, monitor, keyboard, mouse and UPS <p>NOTE: If this hardware is to support more than one facility, each facility must have a 1000mb uplink between the facility and the Server.</p> <p>Customer to provide the Interface Server hardware, to meet or exceed the following minimum specifications:</p> <ul style="list-style-type: none"> -File Server -Main Board -Dual Core 1.6 GHz or greater processor -4 GB RAM -RAID 5 array (500 GB capacity) -CD-ROM drive -Video – 1280 x 1024 res, 24/32 bit color Min -10/100/1000 Network Adapter (2) -Microsoft Windows Server Operating System -Microsoft SQL Server Software -Symantec pcAnywhere -Rack in which to place Server, monitor, keyboard, mouse and UPS 			
9	**RK4	Customer to provide rack enclosure	1		
10	**P_860337_CK1	Installation Cable Kit Control Room Provides all installation cables required for normal installation, Flex Cardio Control Room.	1		
11	**FNA0988	OnSite Clinical Training, 2 days Provides one Clinical Applications Specialist on-site for two days (minimum 8 hours/day) Training is valid for one year from the purchase date. Any unused training will expire after this time.	1		
12	**FNA0989	OnSite Clinical Training, Additional day Provides one Clinical Applications Specialist on-site for one additional day (minimum 8 hours/day). Training is valid for one year from the purchase date. Any unused training will expire after this time.	2		
13	**989801200729	Xper IM Clinical Super User Pre-Requisite e-learn	1		

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Line #	Part #	Description	Qty	Each	Price
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Xper Information Management Clinical Super User Pre-Requisite eLearning

Overview

This **eLearning** training course provides the trainee with the knowledge and skills required for successful completion of the Xper Information Management Clinical Super User ILT Course. This training is designed for new Xper IM clinical Super Users (RN's, RCIS's, RT's, or CVT's) who are unfamiliar with the Xper Information Management application, Flex Cardio Hemodynamic system, and implementation process.

The elearning is taught using a combination of presentation, demonstration, and hands on experience, all through a virtual computer-based training environment. This course also has a downloadable supplement document, which is to be read during this course.

Upon completion of this course, Clinical Super Users should be able to implement the skills learned to add users to their database, employing all the security features available within the application. They should be able to create User Roles based on user's job functions and/or application functions, within the department. The skills learned in this elearning module will be necessary for the successful completion of the Clinical Super User instructor-led course.

Features

- Individuals who successfully complete this elearning training will be able to:
- Explain, in general terms, the features and functions available in the Xper IM Application
- Describe the function of each of the components comprising the Xper IM network
- Describe how to maneuver through the application using the function Beans
- Explain how to log into the application
- Identify how to meet the demands of the hospital's rigid user security requirements by utilizing the security features of the Xper IM Hemodynamic System.

Recommended Attendees

- Xper Information Management Clinical Super Users (RN's, RCIS's, RT's, or CVT's) – Not for IT's.
- The prospective student should have knowledge of clinical procedures and facility workflow, basic PC knowledge of Windows OS (copy, paste, find files, keyboard and mouse usage).
- Students should have the authority to make decisions regarding database changes for their facilities.

Engagement Deliverables

- The elearning course can be accessed online from the Philips Learning Center (PLC).
- The elearning course is not available in CD/DVD format.

Engagement Completion Criteria

- Successful completion of the Xper Information Management Clinical Super User Pre-Requisite elearning course will be based on completing the quiz through the PLC.

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Line #	Part #	Description	Qty	Each	Price
16	**989801200726	Contracts - Remote PS hours	28		
		<p>Philips Healthcare applies disciplined project management methodology to delivery of each engagement. Our methodology closely parallels the Project Management Institute's (PMI) worldwide -recognized framework of Initiating, Planning, Executing, Controlling and Closing. The Philips team, led by an experienced project manager, will work with you throughout the duration of the project to deliver the products and services described in this quotation. Team members typically include the following:</p> <ul style="list-style-type: none">• Implementation Specialists - responsible for technical work such as installation and configuration of the system hardware and software• Application Consultants – responsible working within the clinical environment providing expertise in workflow, application configuration and training• Integration Engineer – responsible for development and testing of HIS and clinical interfaces <p>The work effort to implement your solution is based upon the specific configuration that has been defined in the quotation. The Statement of Work (SOW) or Project Scope Document (PSD) describes how the solution will be implemented within your environment.</p>			
17	**FNA0857	Total number of Facilities	1		